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Memo

Date 6 May 2015
To James Duggleby - Senior Hydrogeologist AGL Upstream Investments Pty Ltd
From Chris Richard
Ref 2268520B-RES-MEM-001 RevB
Subject Gloucester Gas Project - FY15 Q3 Monitoring Update - March 2015

This memo presents updated hydrographs for all Gloucester Gas Project groundwater monitoring bores and hydrograph and salinity traces (measured as electrical conductivity) for surface water monitoring sites to March 2015. Full analysis and discussion of these results will be presented in the comprehensive 2015 Annual Report which will detail all groundwater and surface water level and quality results from the 2014/15 monitoring period.

For the FY15 Q3 period:

- The data logger at FKMB01B failed in November and has been replaced.
- Data from loggers in TCMB04 and TTMB02 will be retrieved in Q4.

Figures 1 - 8: Groundwater hydrographs for Stage 1 and 2 nested monitoring bore sites

Figures 9 and 10: Surface water levels and electrical conductivity for all monitoring sites

Figure 11: Groundwater levels at the PL03 Vibrating Wire Piezometer and WKMB05

Figures A.1 – A.22: Individual Stage 1 and 2 groundwater monitoring bore hydrographs

Figures A.23 – A.30: Individual surface water level and electrical conductivity hydrographs

Figure A.31: Individual PL03 Vibrating Wire Piezometer hydrographs

Figures A.32 – A.34: Individual hydrographs from WKMB05 sensors

Yours sincerely



Chris Richard
Environmental Scientist

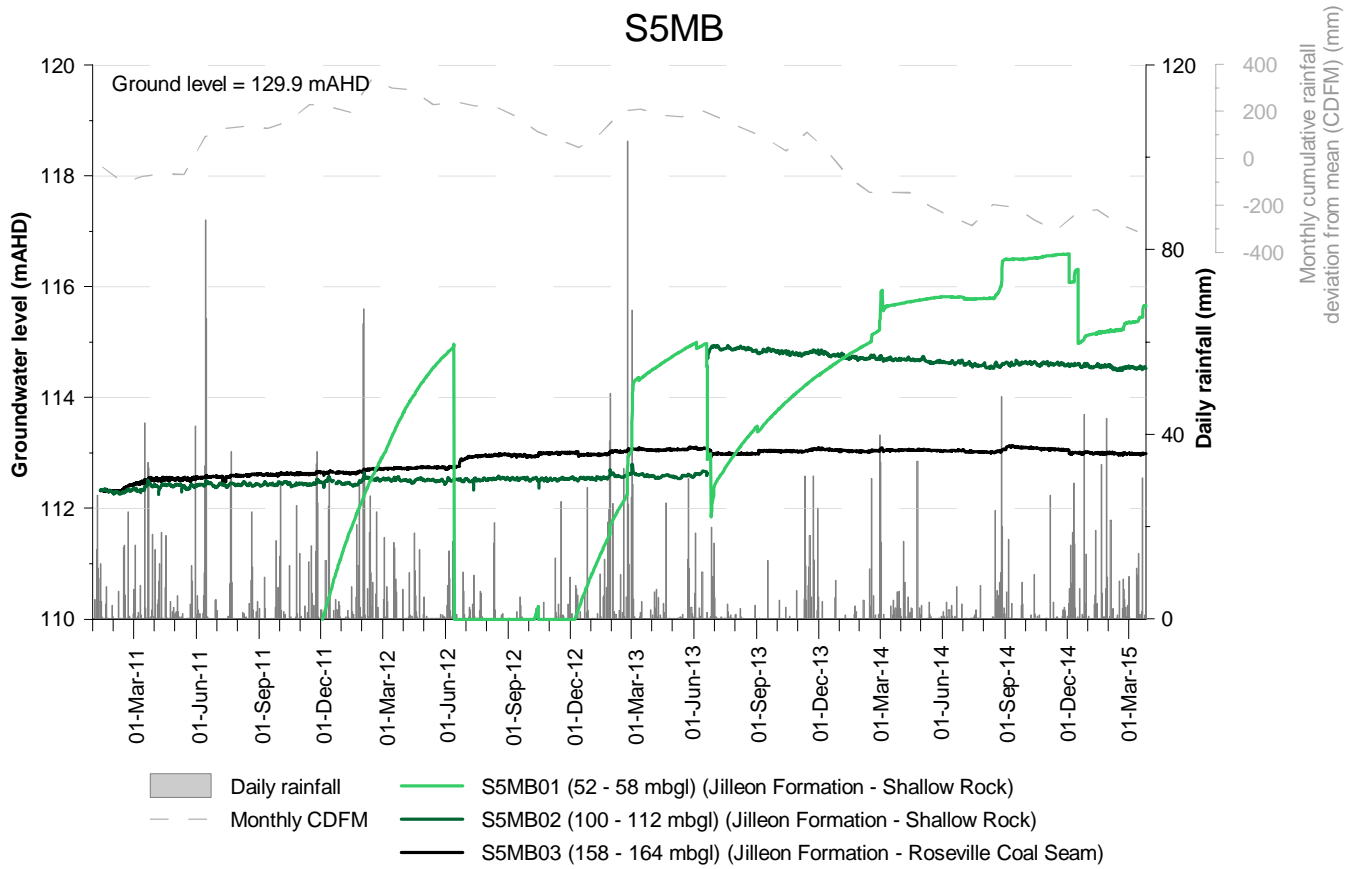
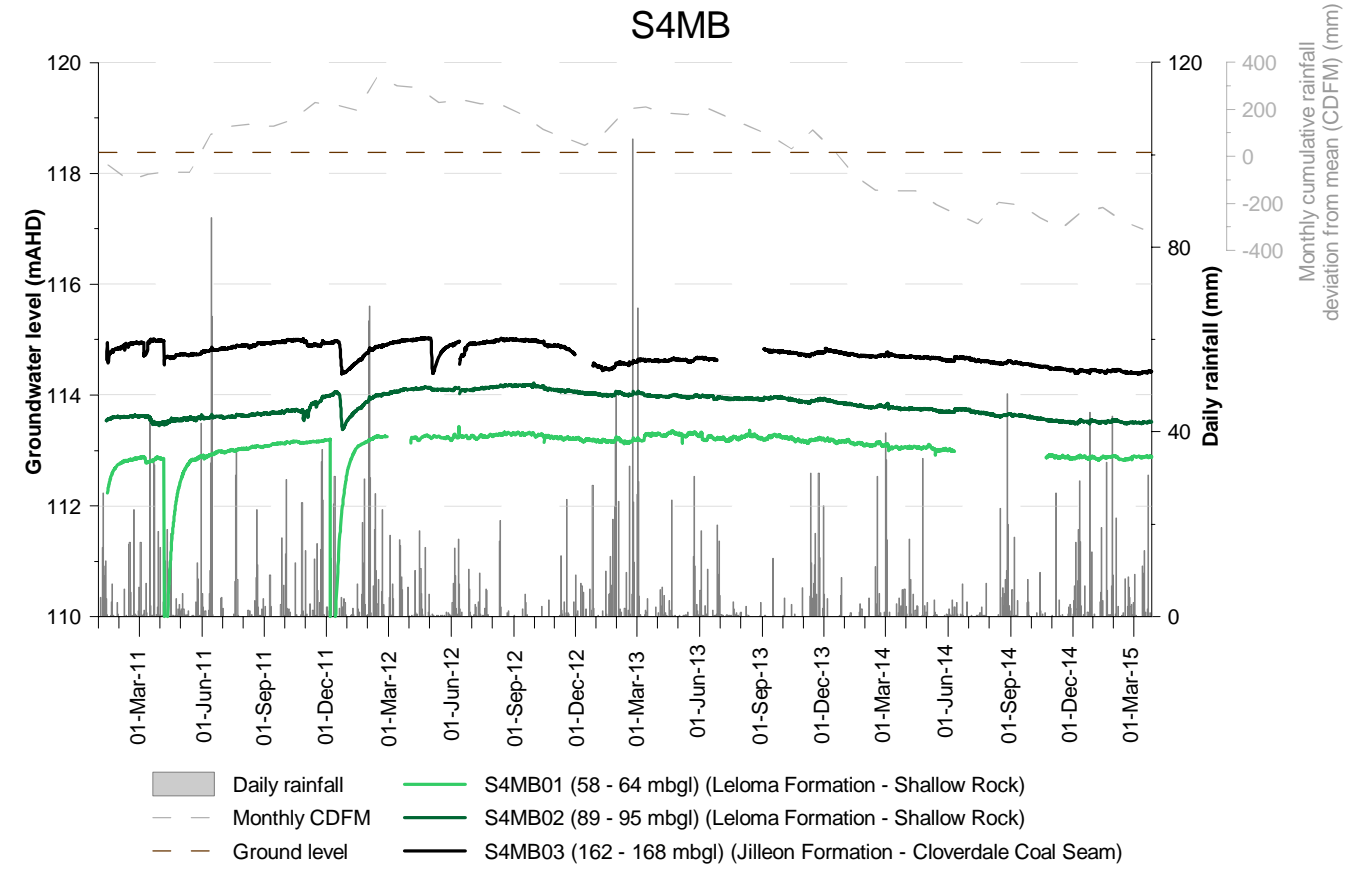


Figure 1: S4 and S5 monitoring bores

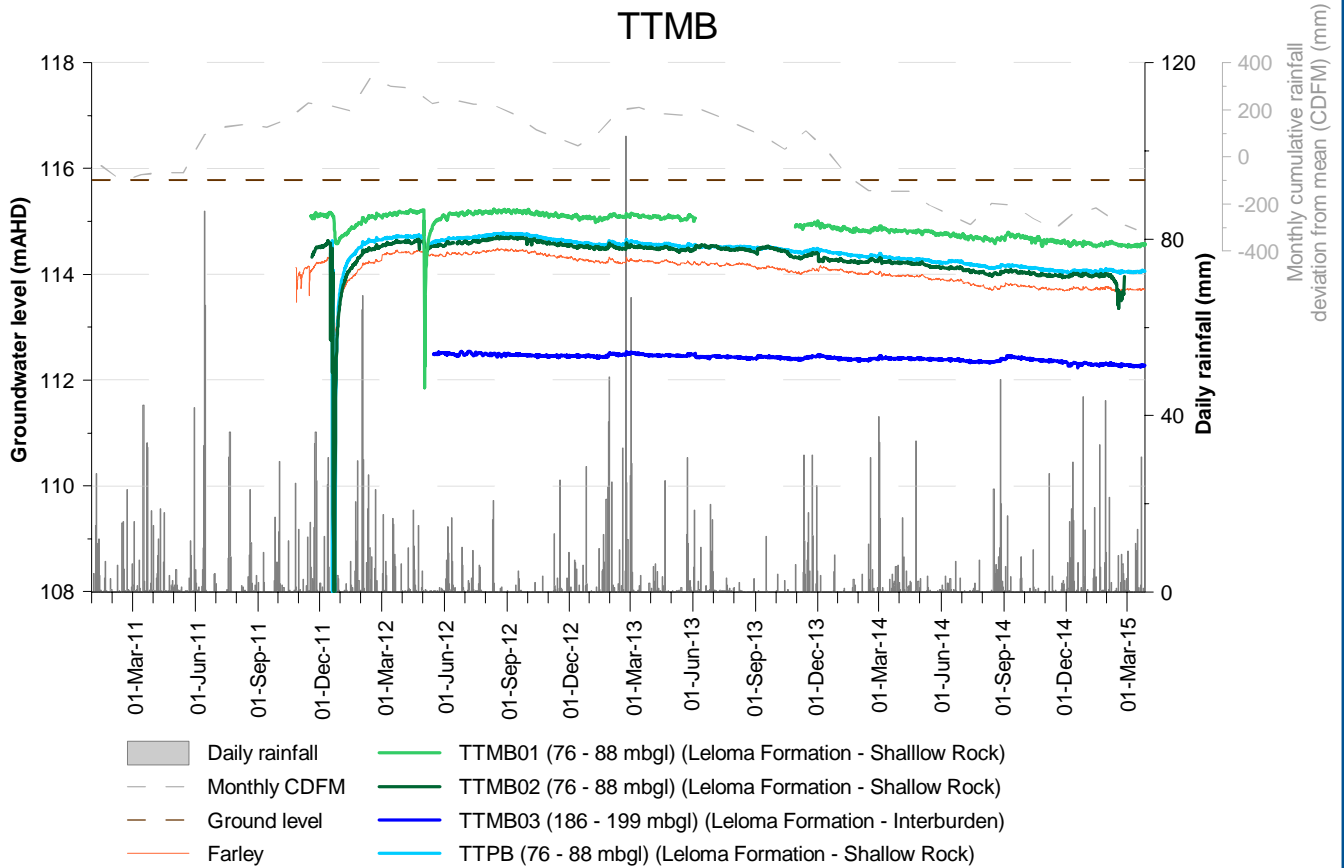
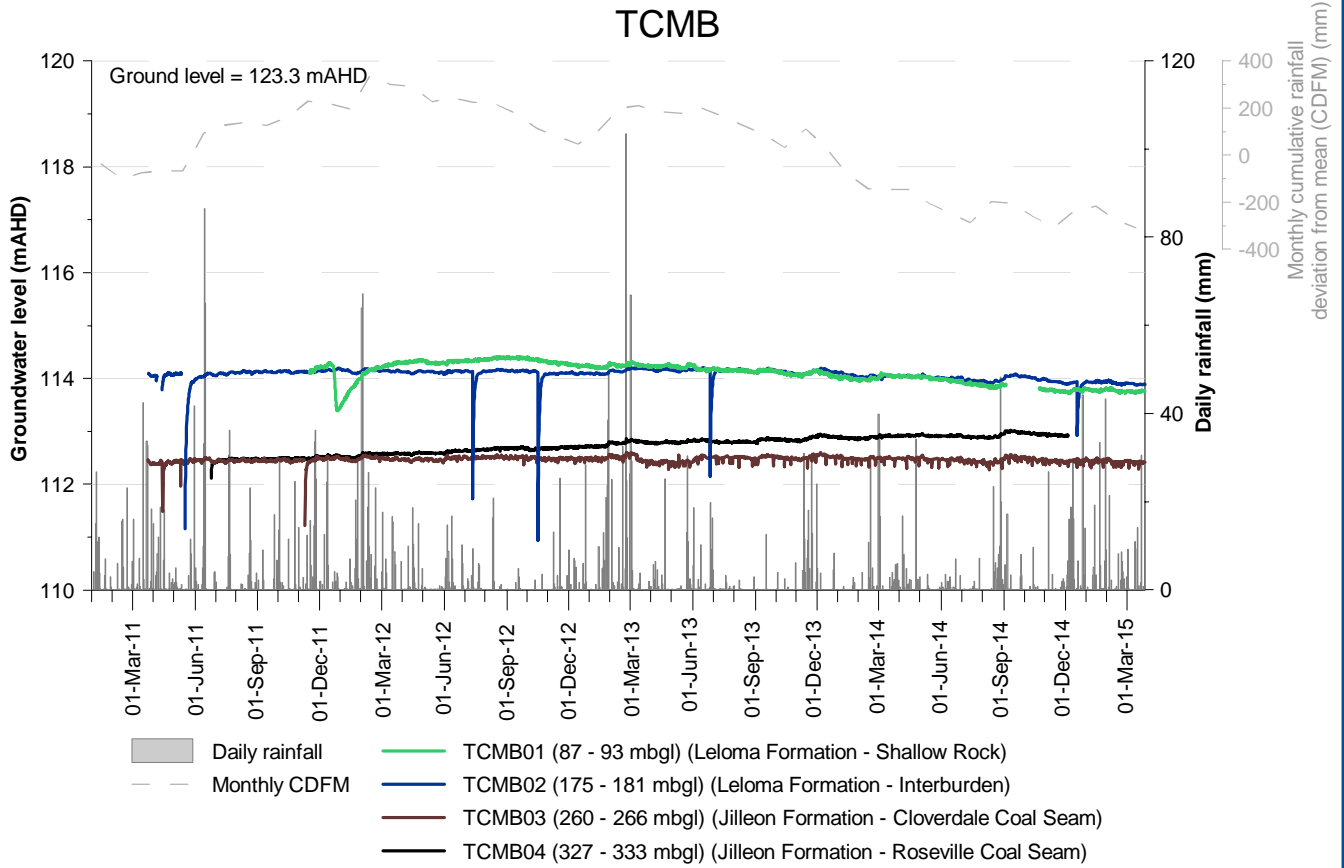


Figure 2: TCMB and TTMB monitoring bores

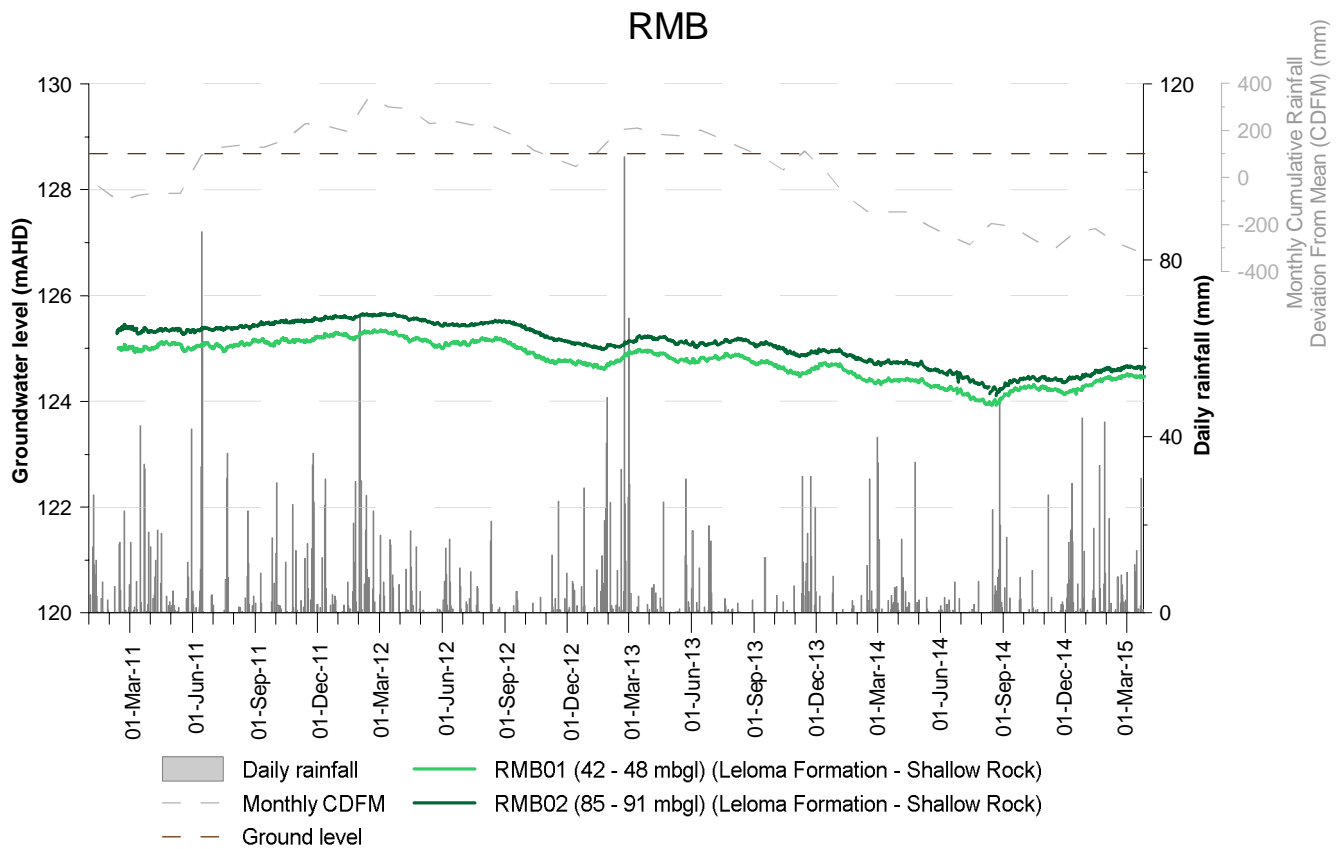
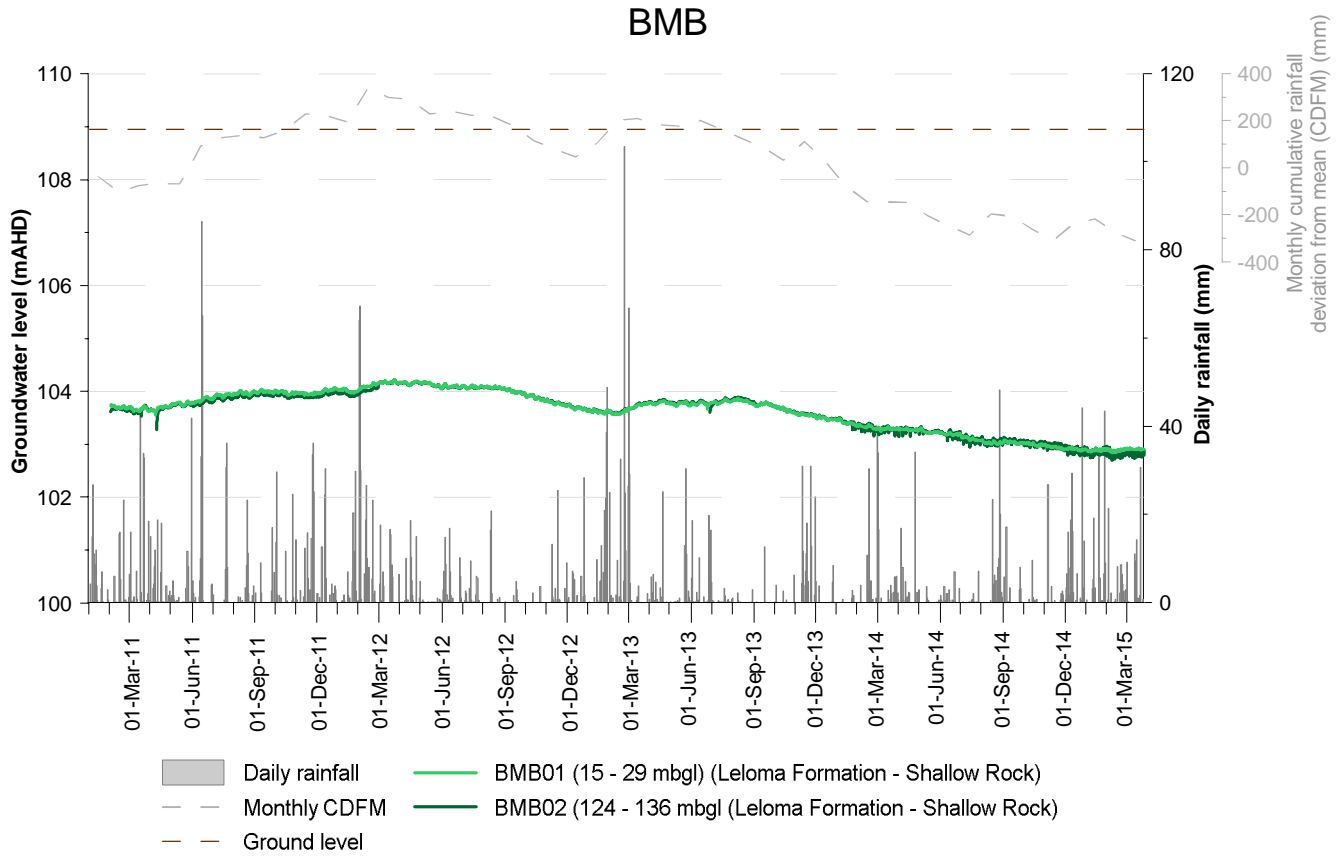


Figure 3: BMB and RMB monitoring bores

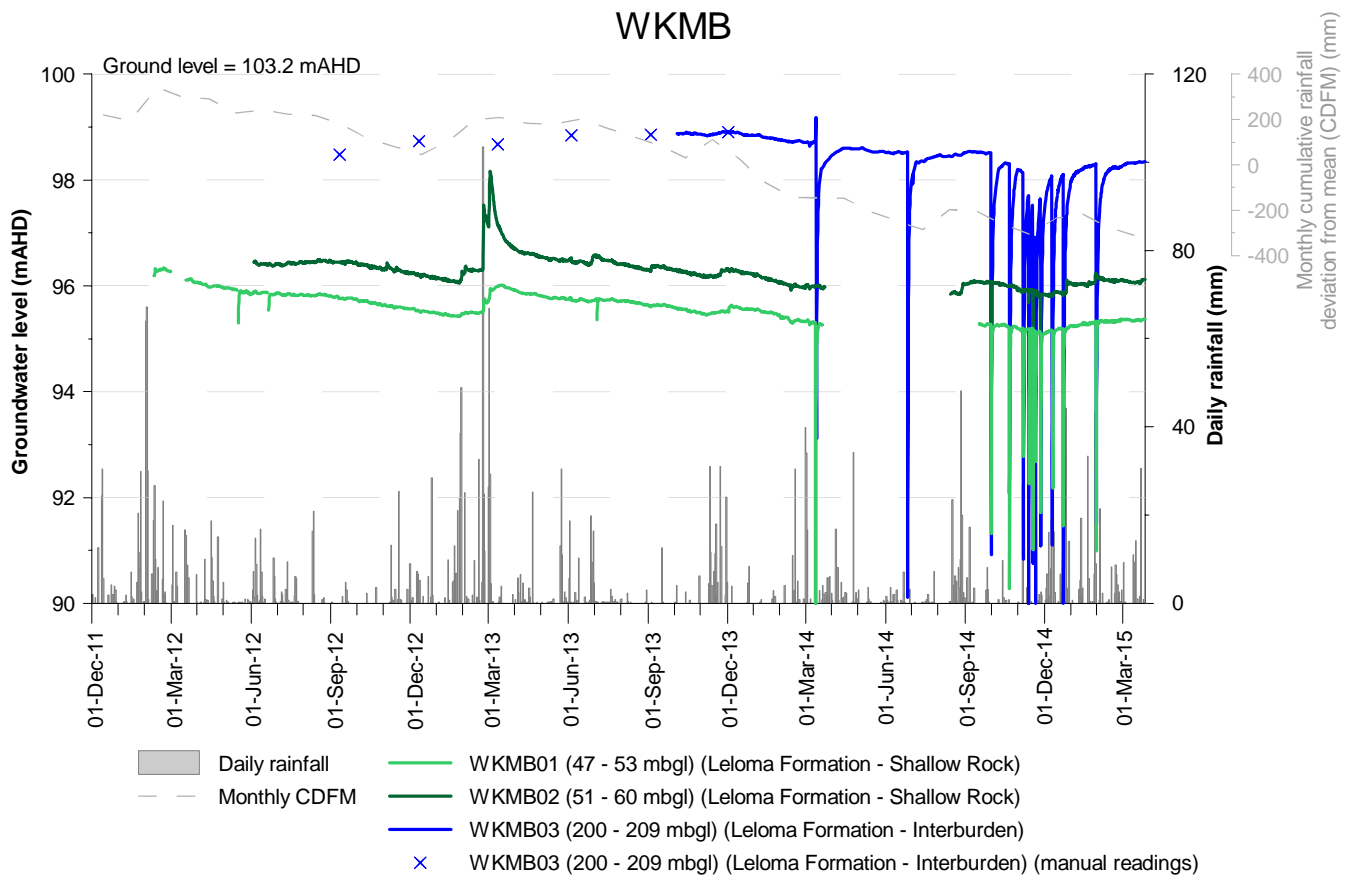
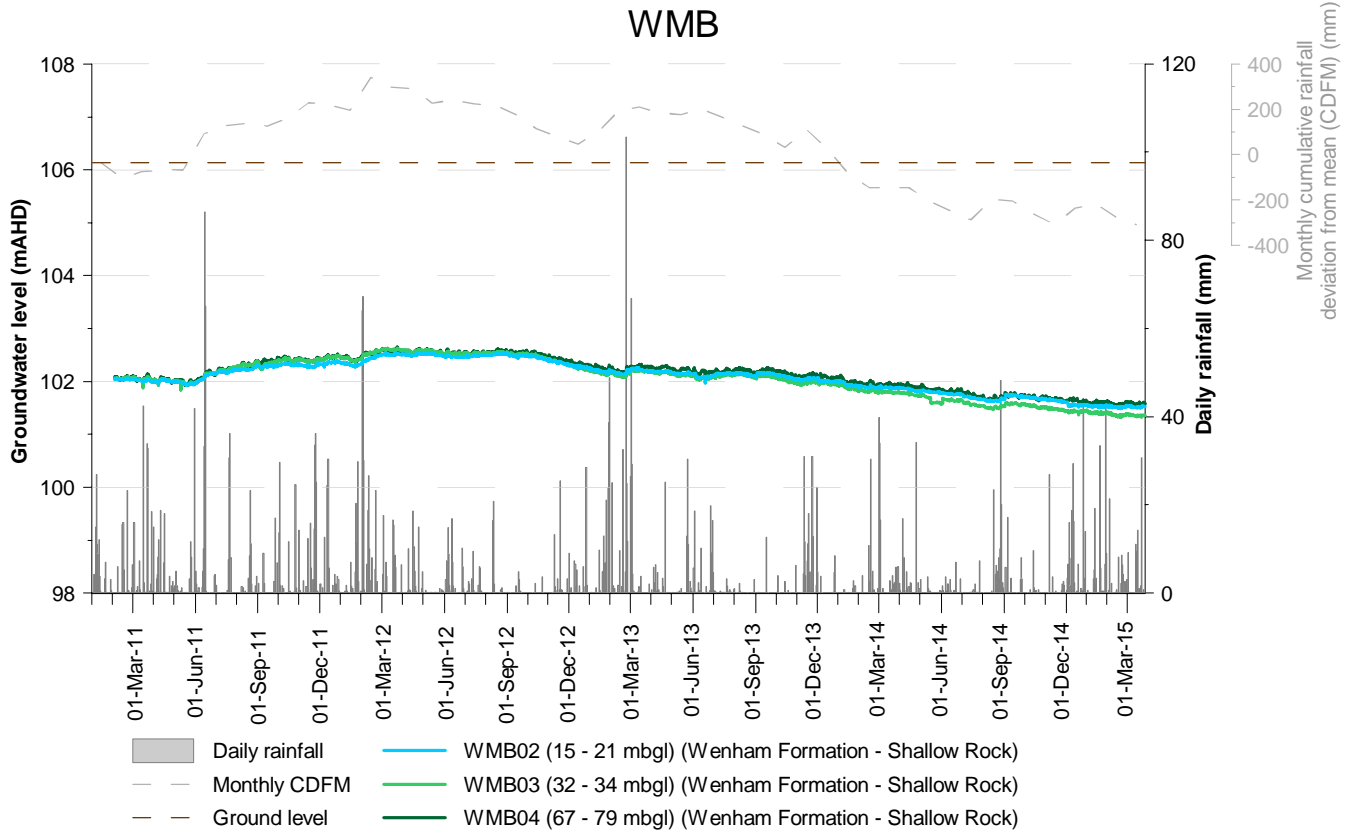


Figure 4: WMB and WKMB monitoring bores

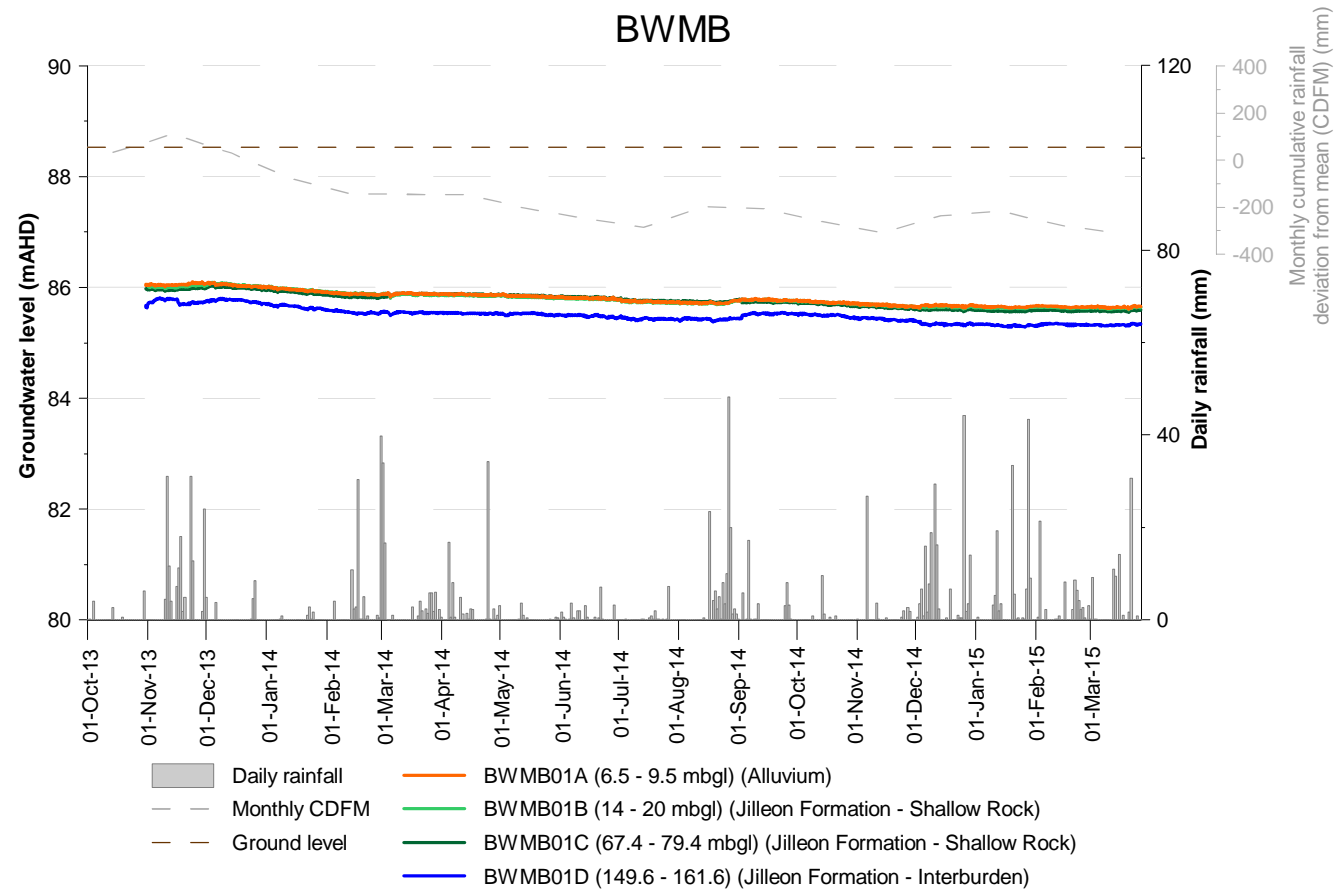
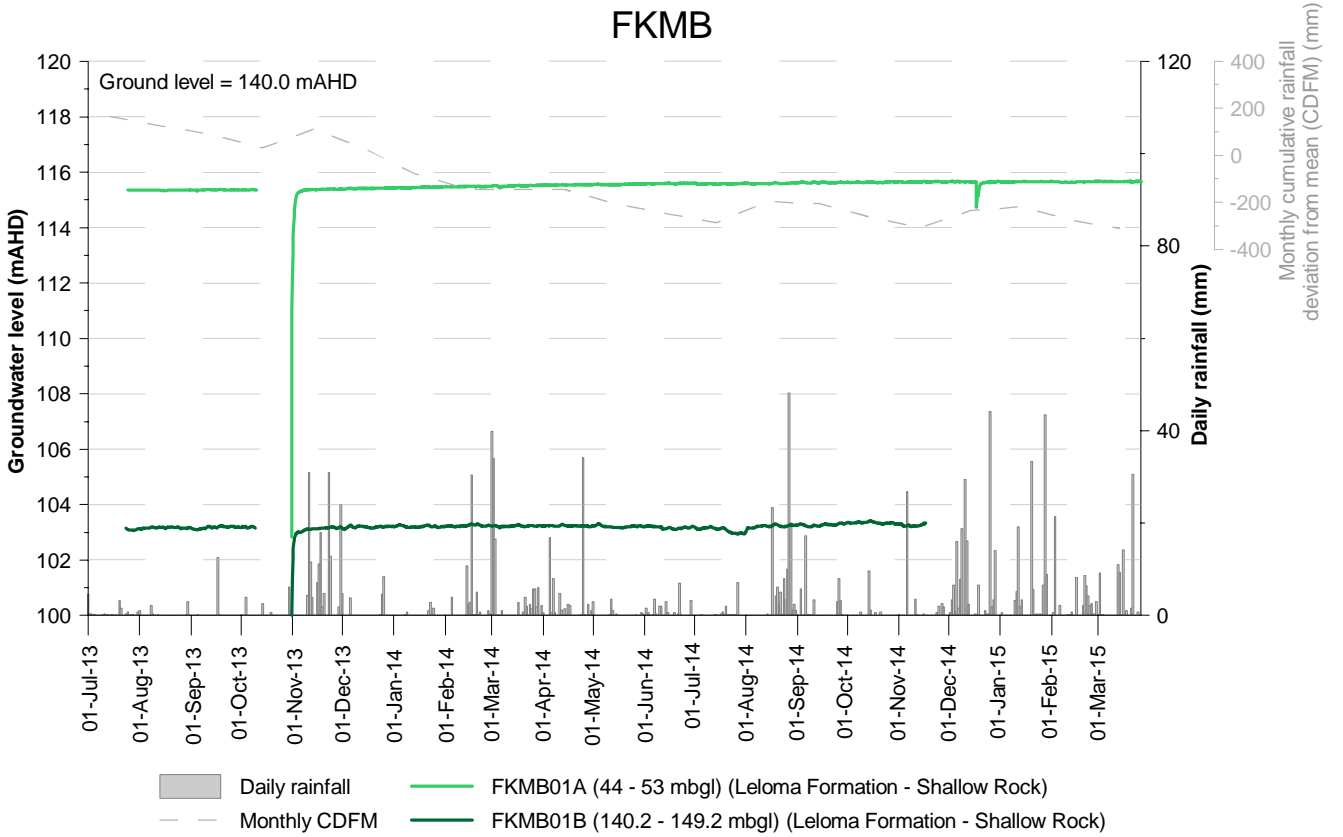
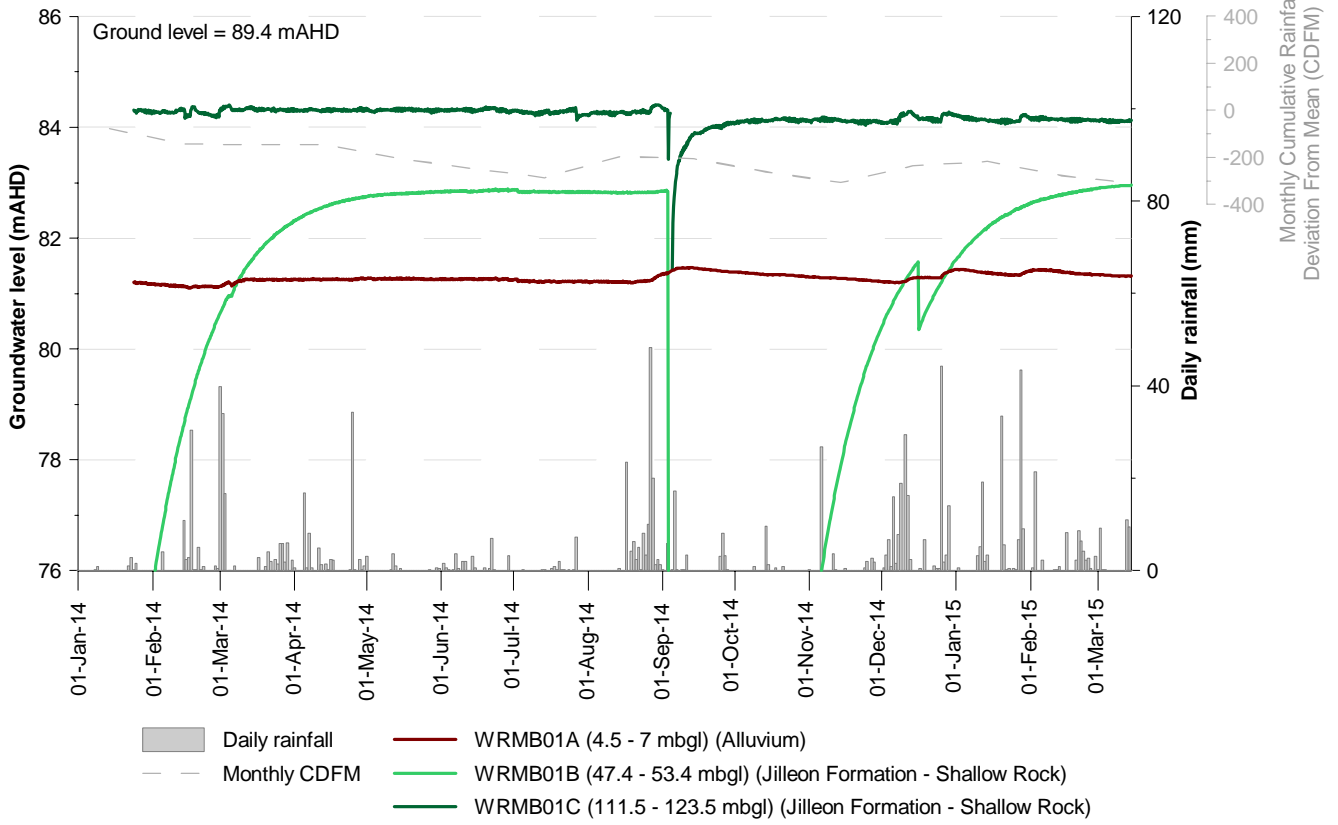


Figure 5: FKMB and BWMB monitoring bores

WRMB



WKMB06

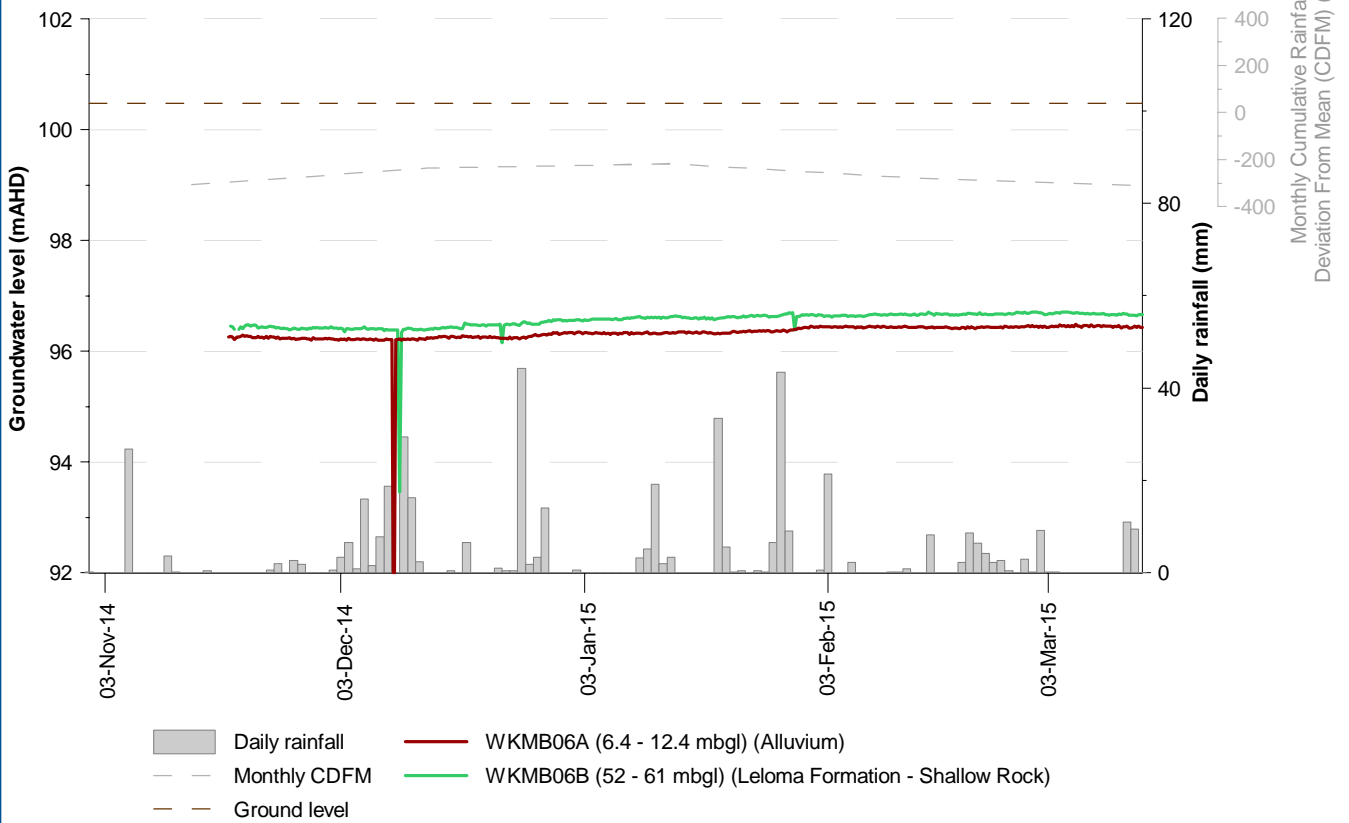


Figure 6: WRMB and WKMB06 monitoring bores

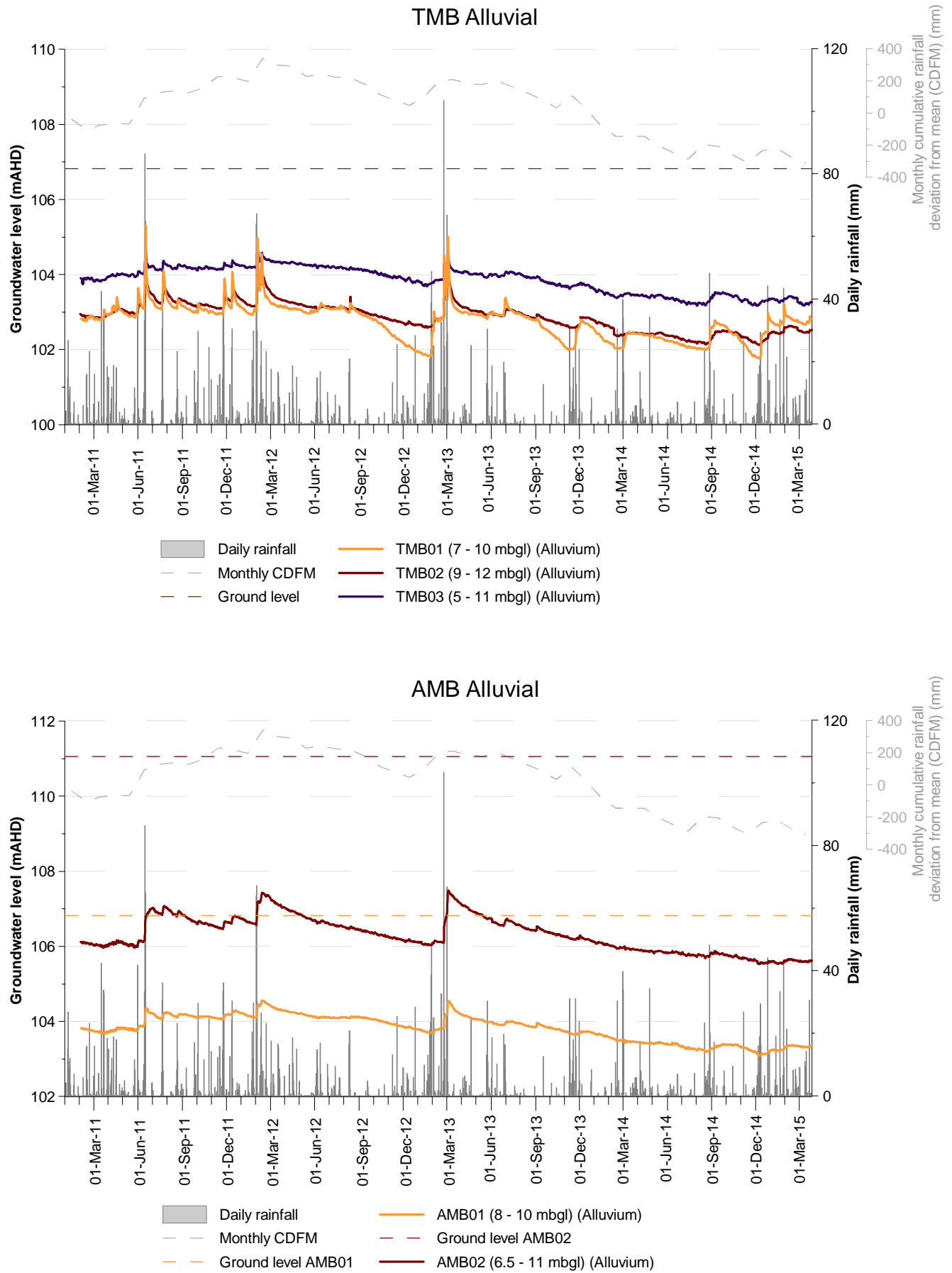


Figure 7: TMB and AMB Alluvial monitoring bores

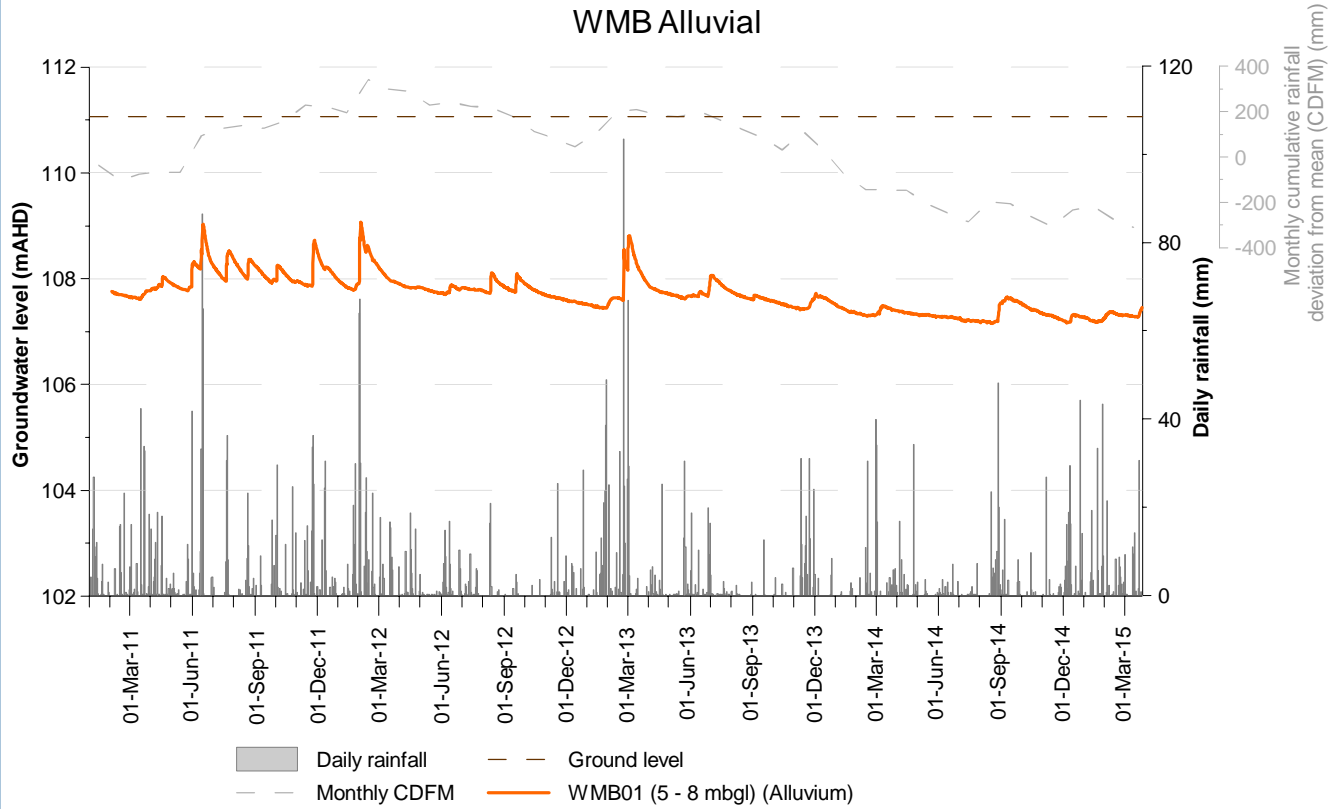


Figure 8: WMB Alluvial monitoring bore

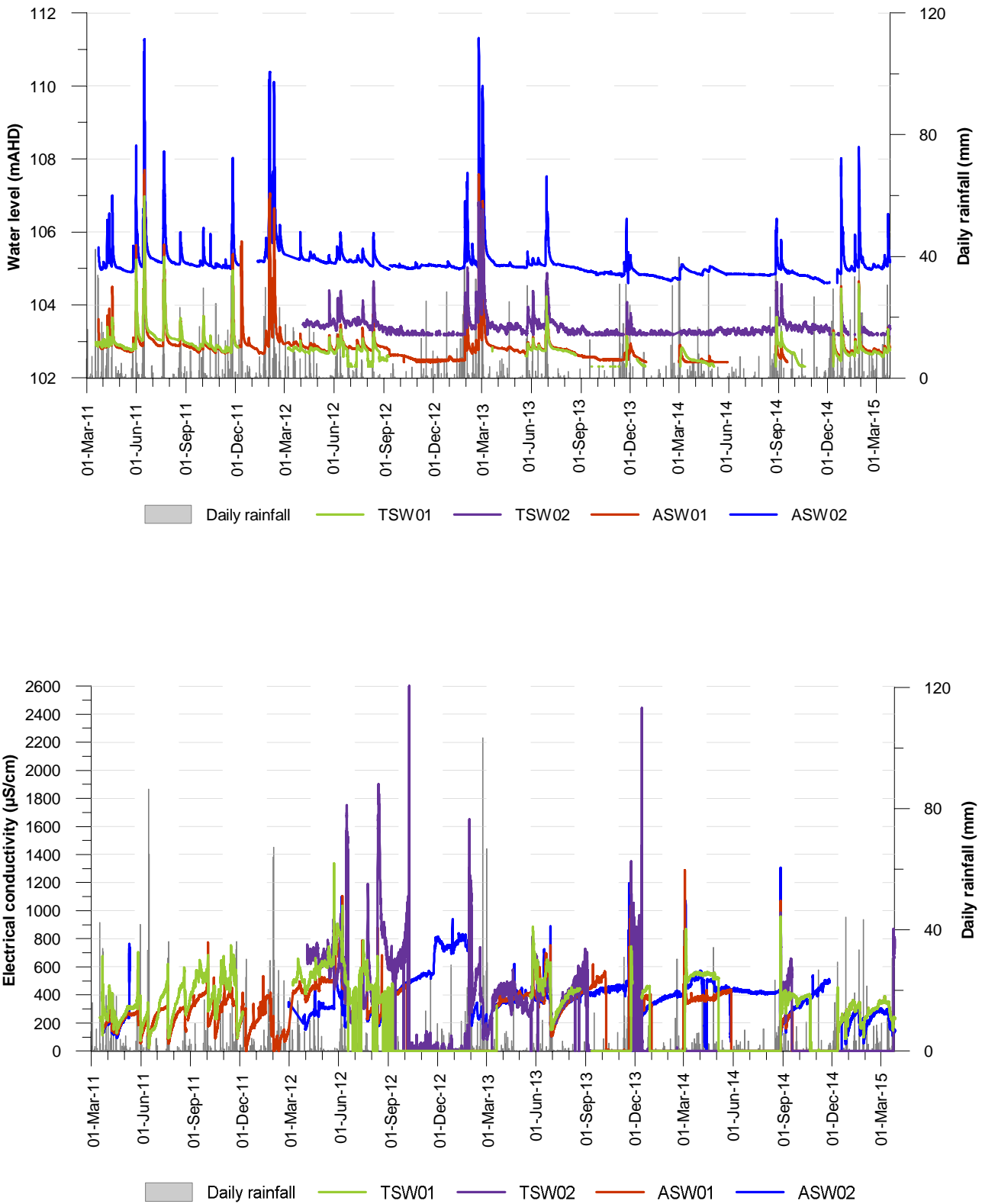


Figure 9: TSW01, TSW02, ASW01 and ASW02 surface water levels and electrical conductivity

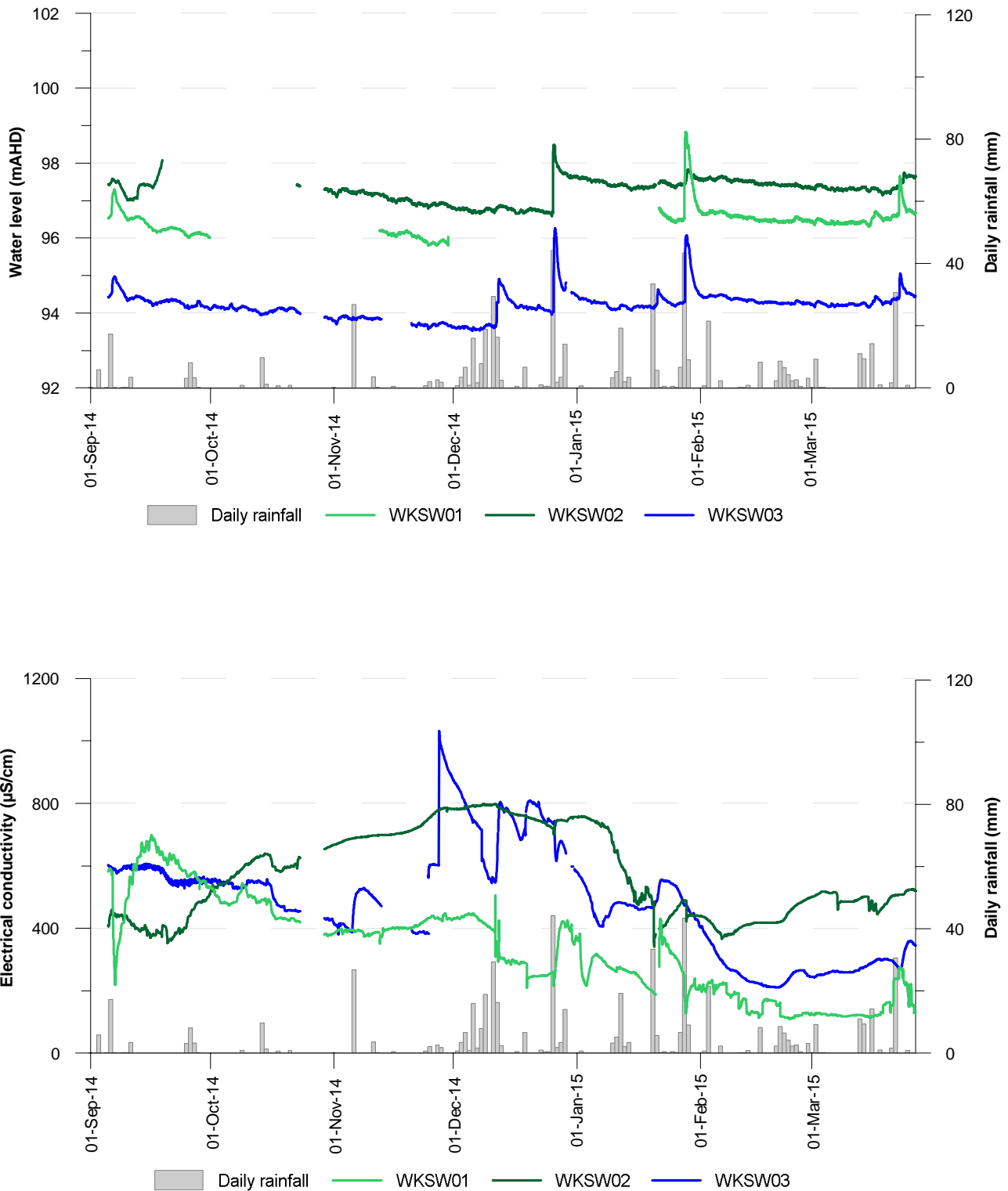


Figure 10: WKS01, WKS02 and WKS03 surface water levels and electrical conductivity

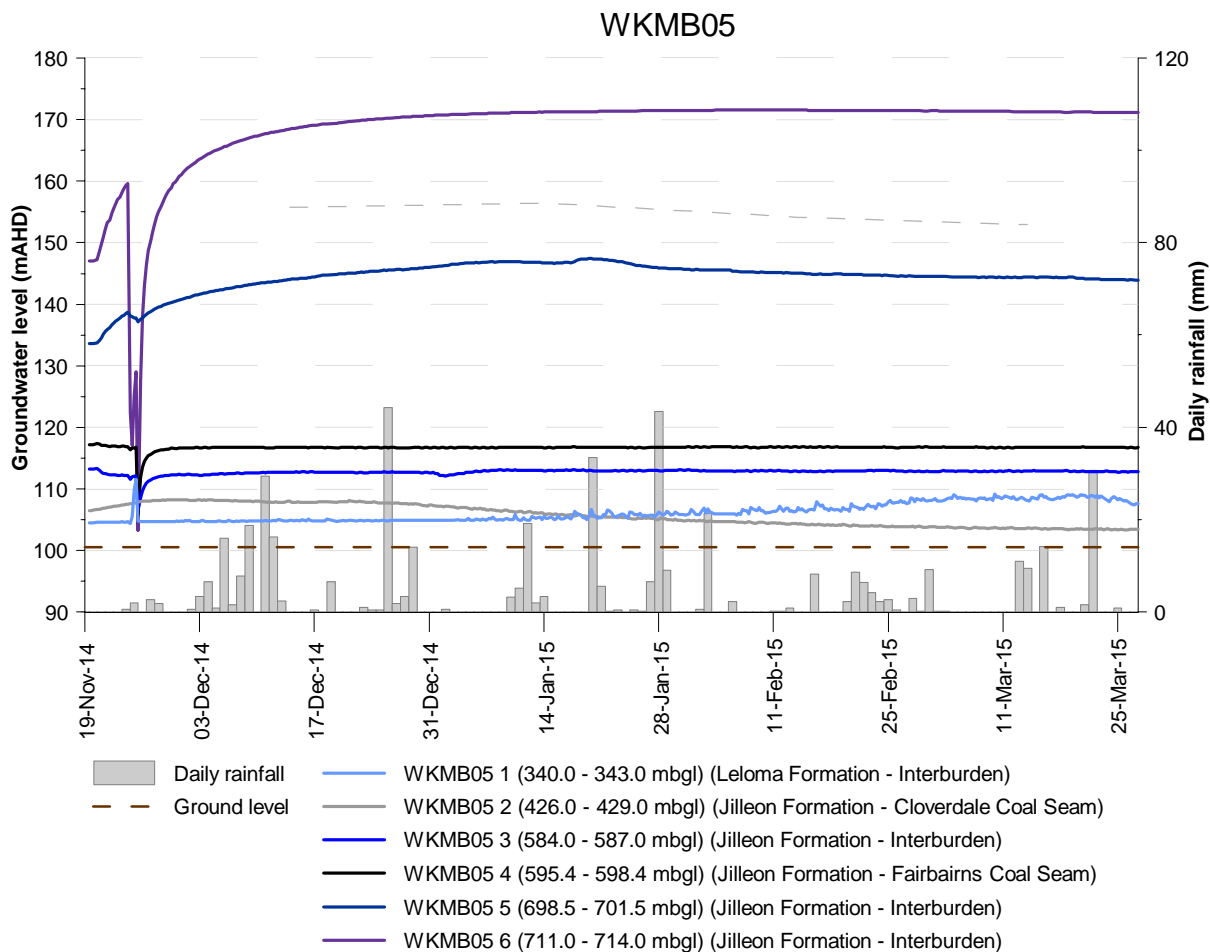
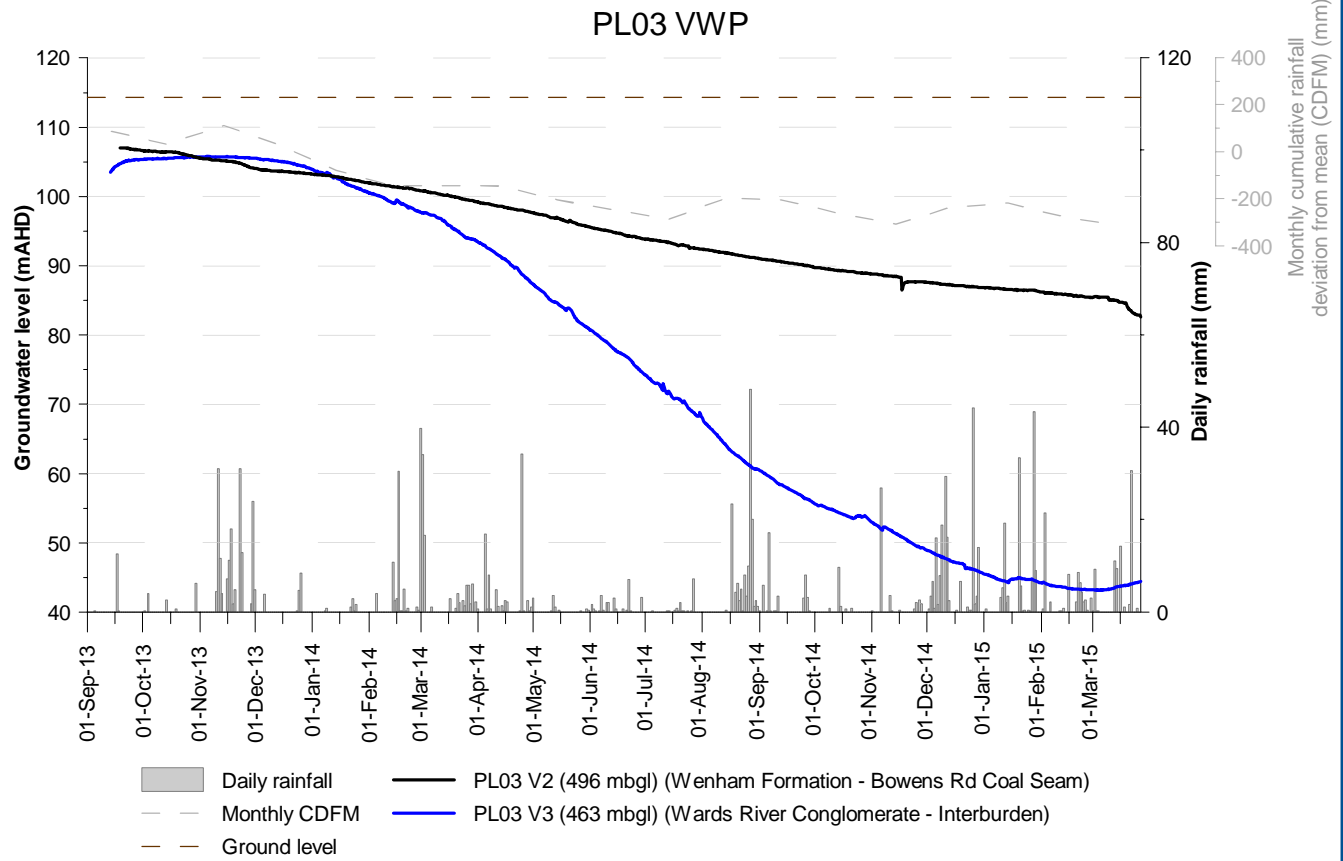


Figure 11: PL03 vibrating wire piezometer and WKMB05 multizone monitoring well

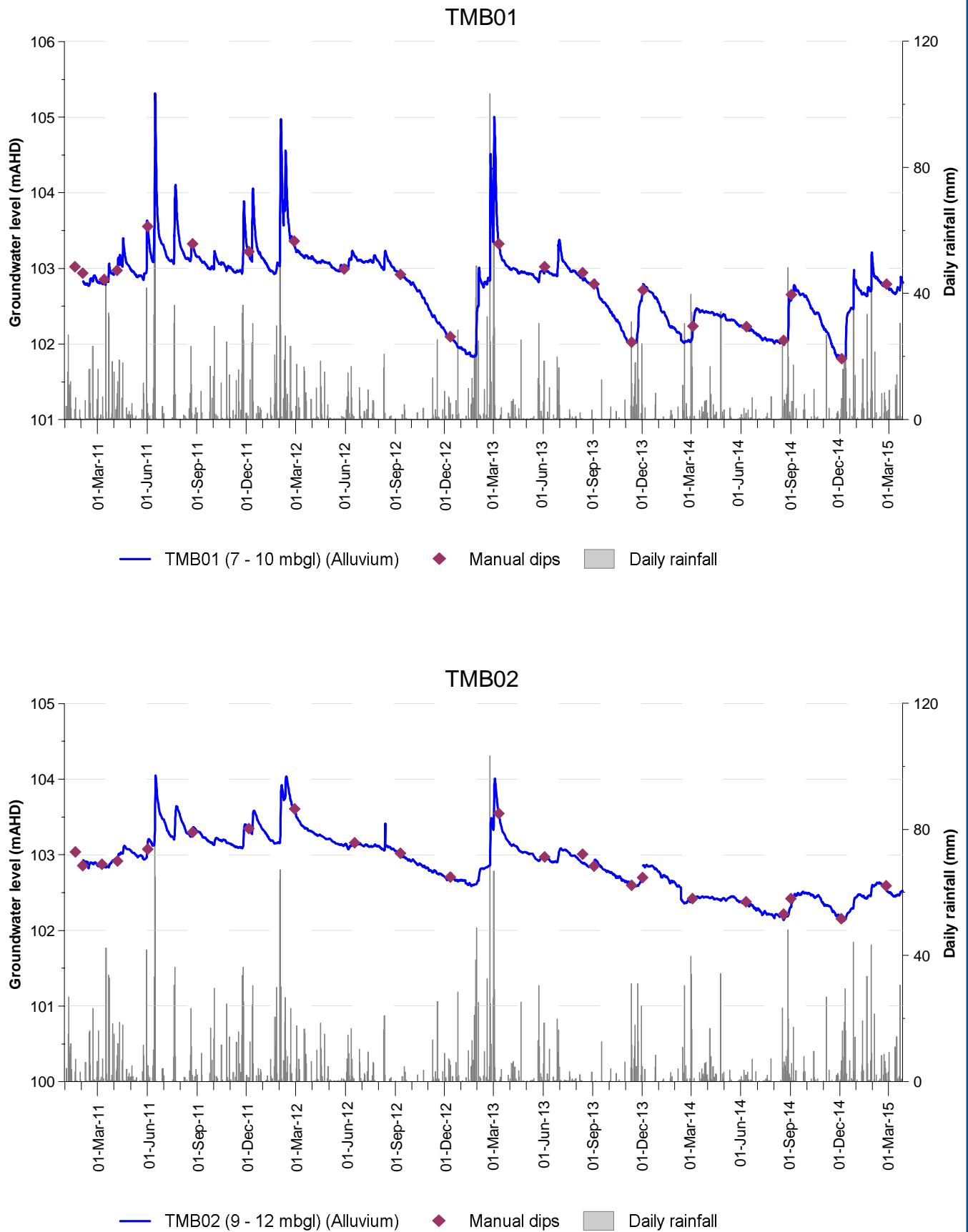


Figure A.1: TMB01 and TMB02 monitoring bores

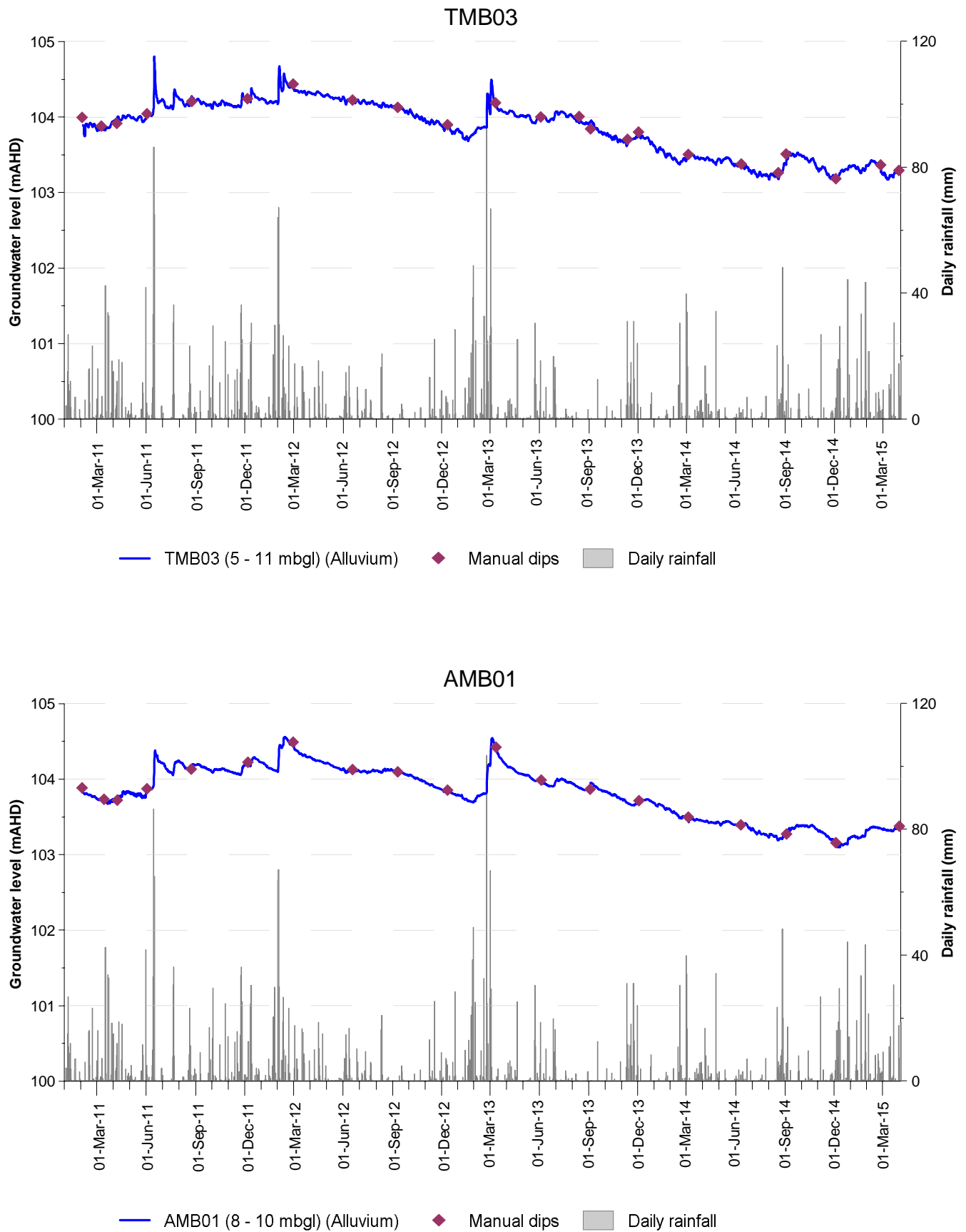


Figure A.2: TMB03 and AMB01 monitoring bores

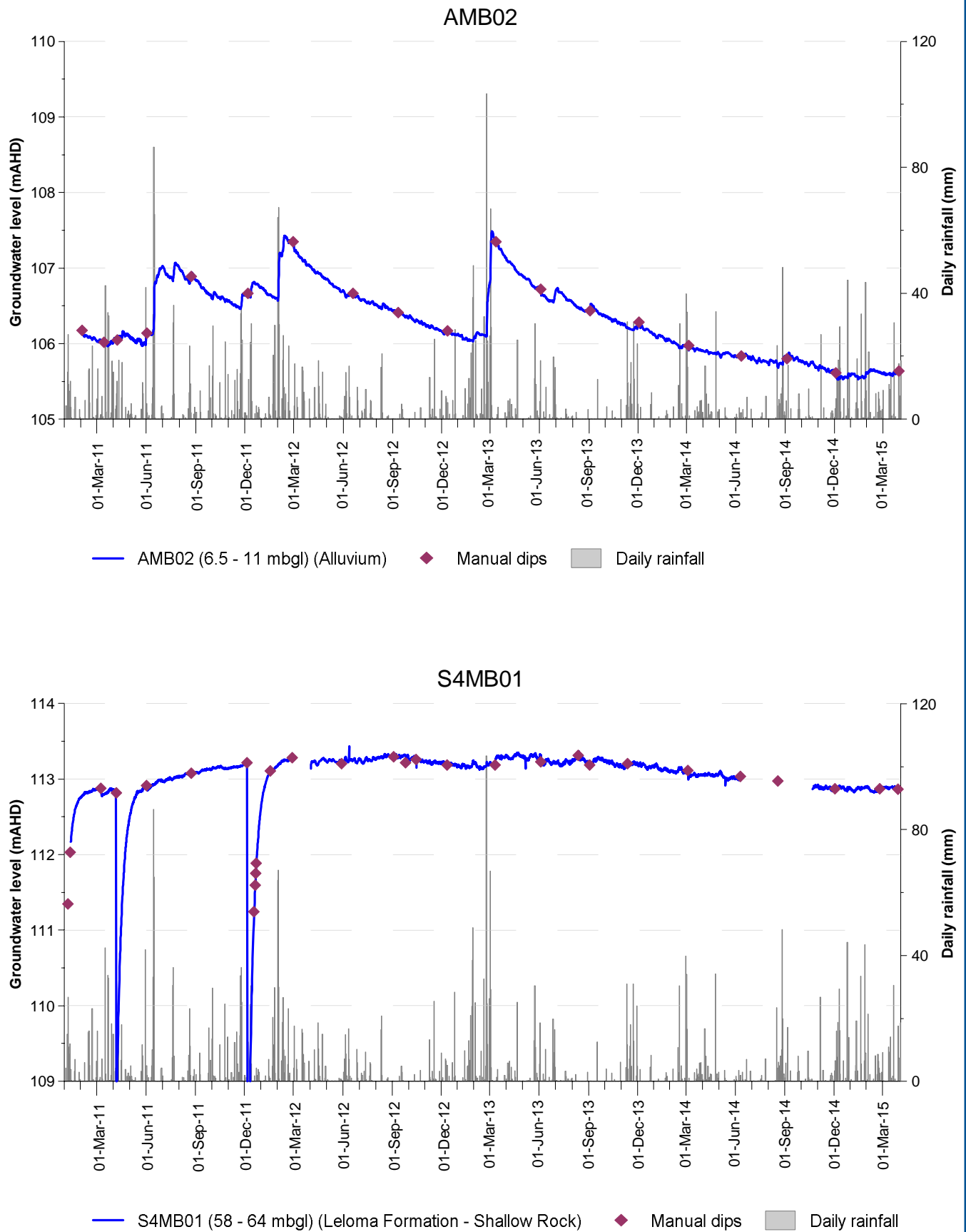


Figure A.3: AMB02 and S4MB01 monitoring bores

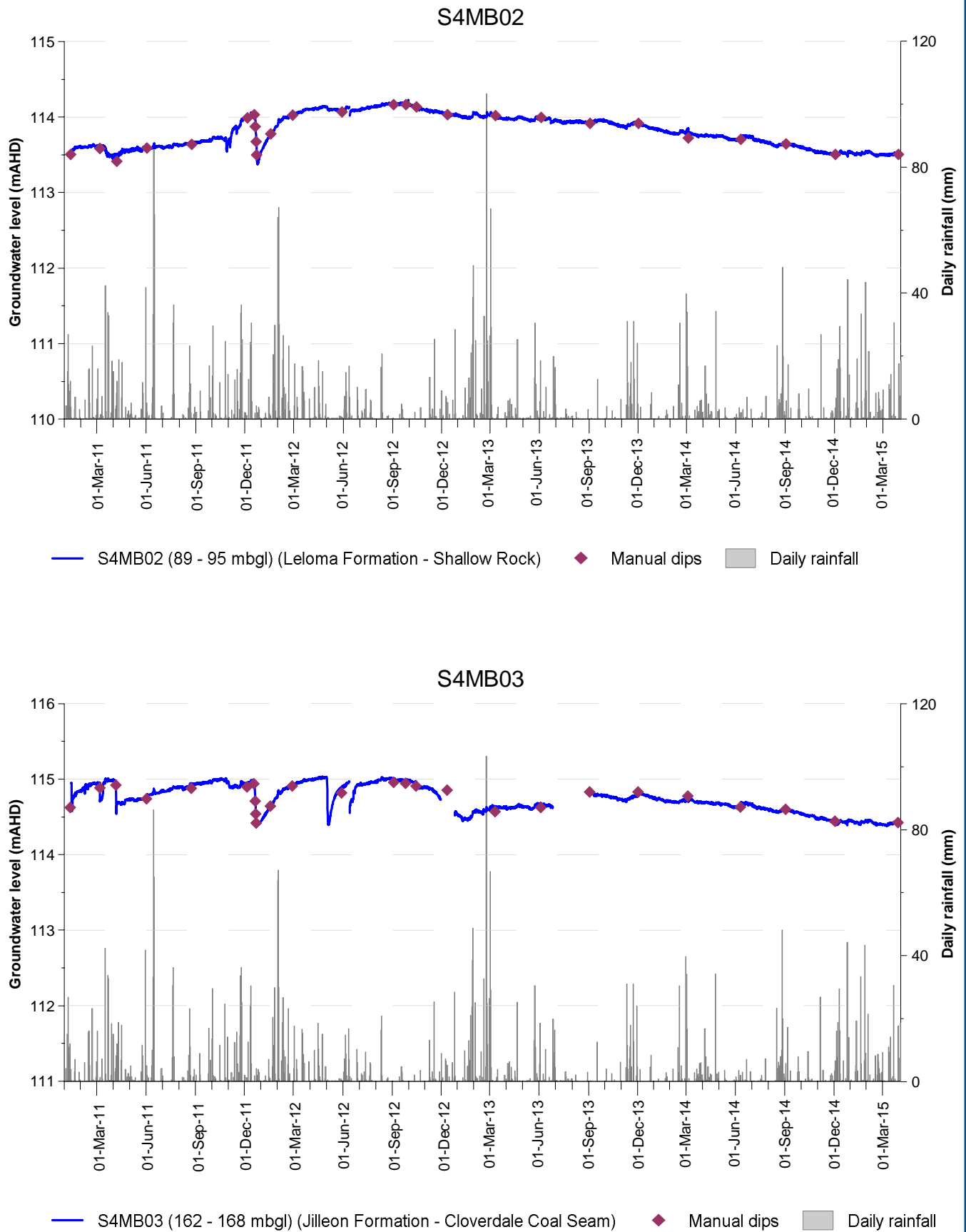


Figure A.4: S4MB02 and S4MB03 monitoring bores

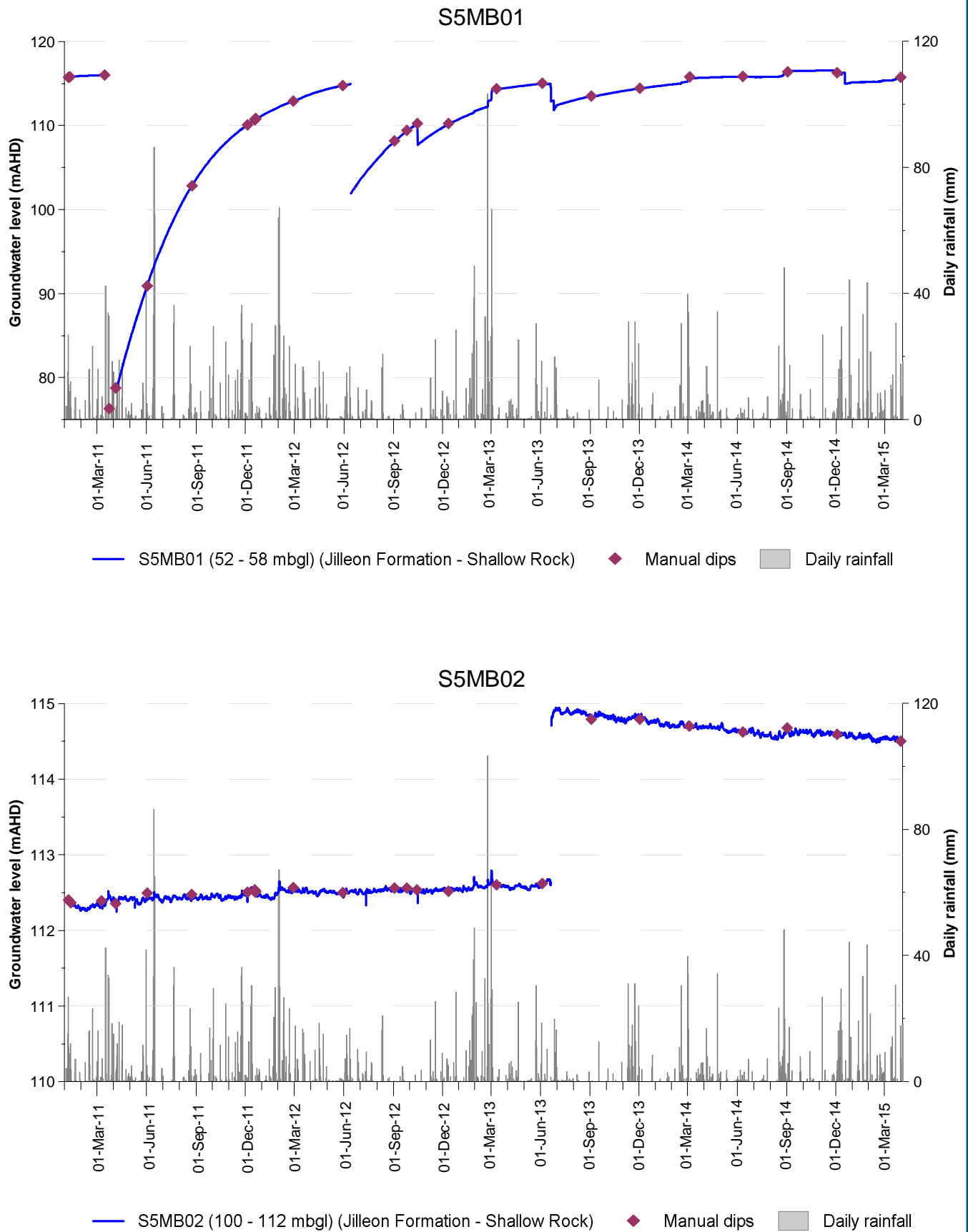


Figure A.5: S5MB01 and S5MB02 monitoring bores

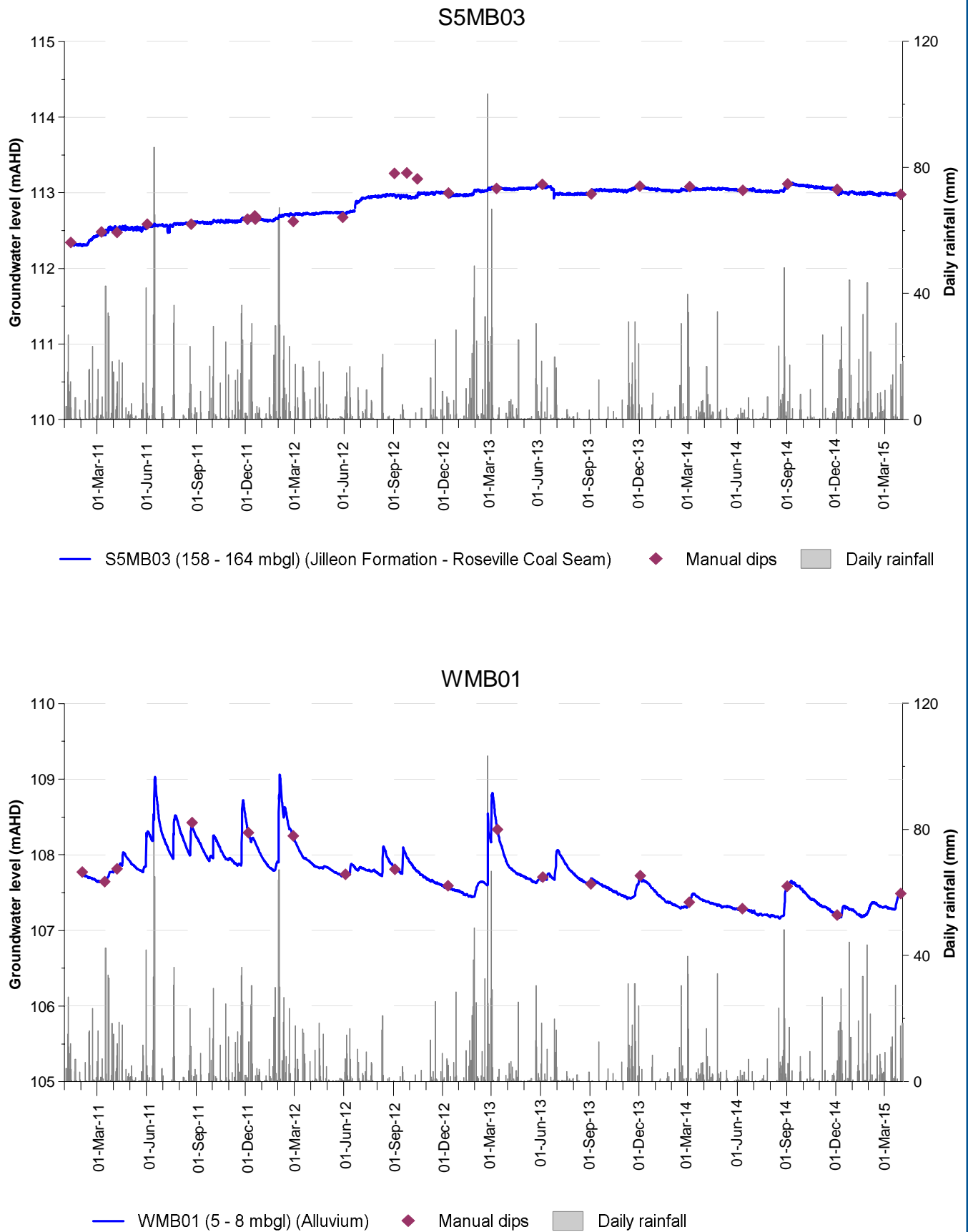


Figure A.6: S5MB03 and WMB01 monitoring bores

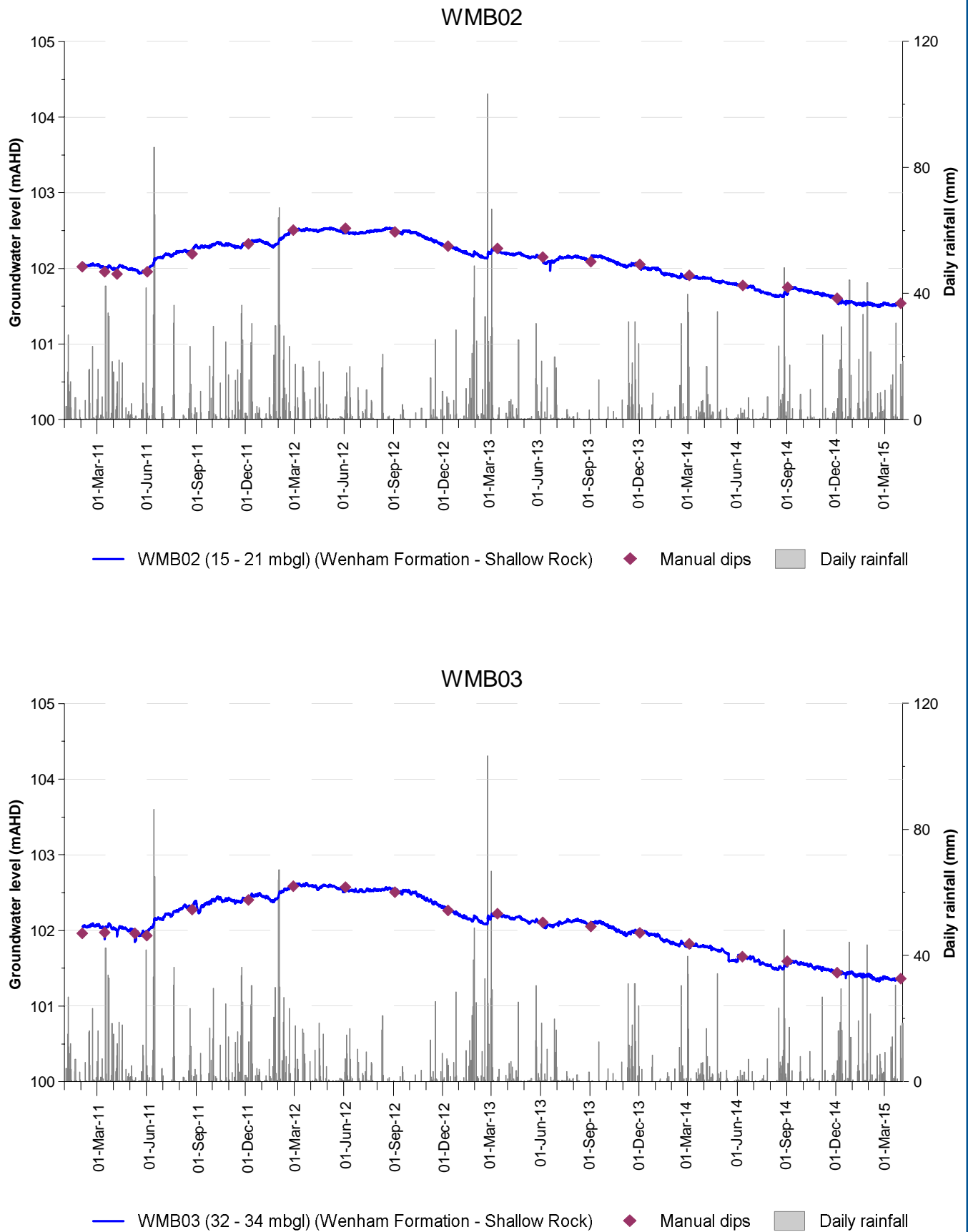


Figure A.7: WMB02 and WMB03 monitoring bores

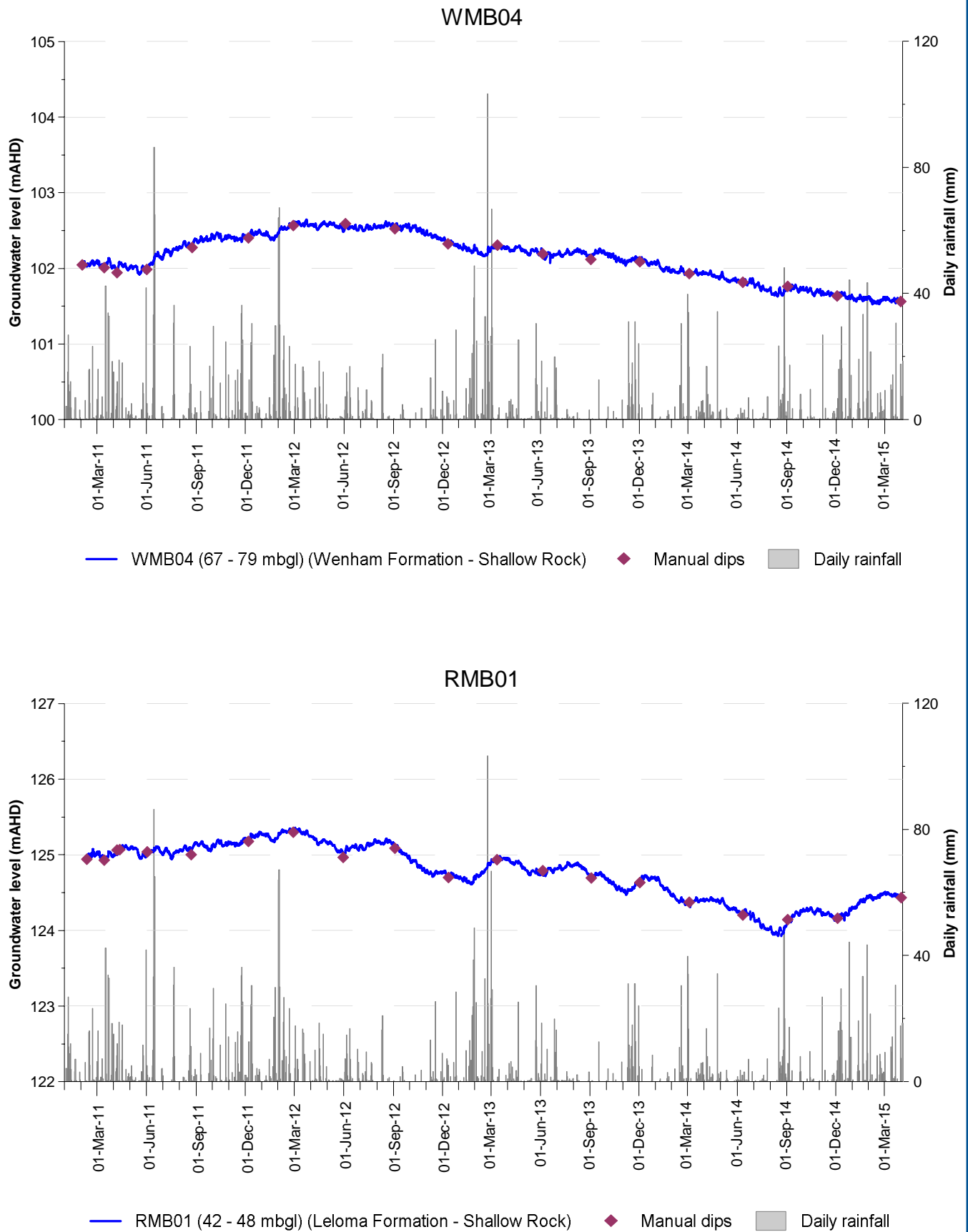


Figure A.8: WMB04 and RMB01 monitoring bores

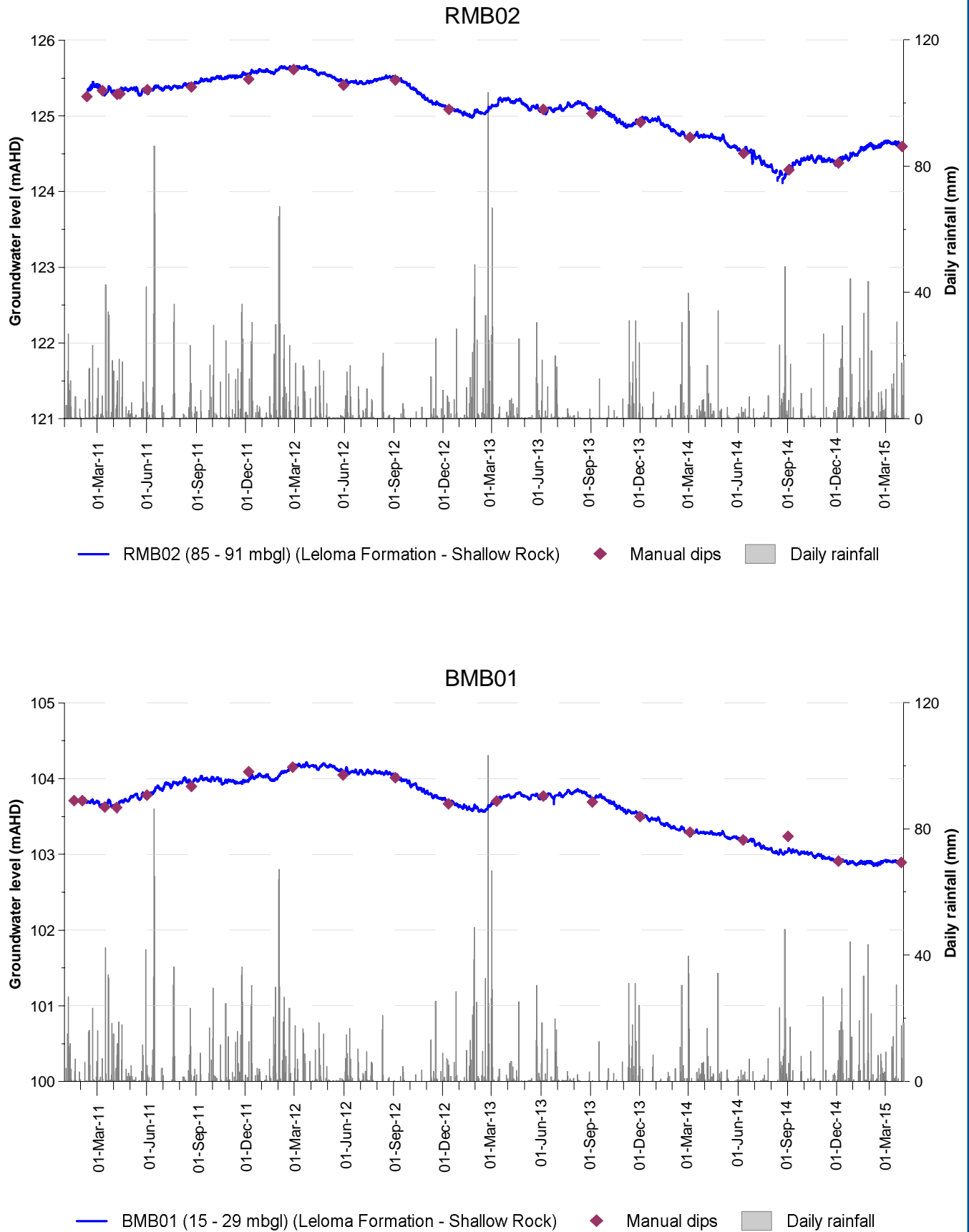


Figure A.9: RMB02 and BMB01 monitoring bores

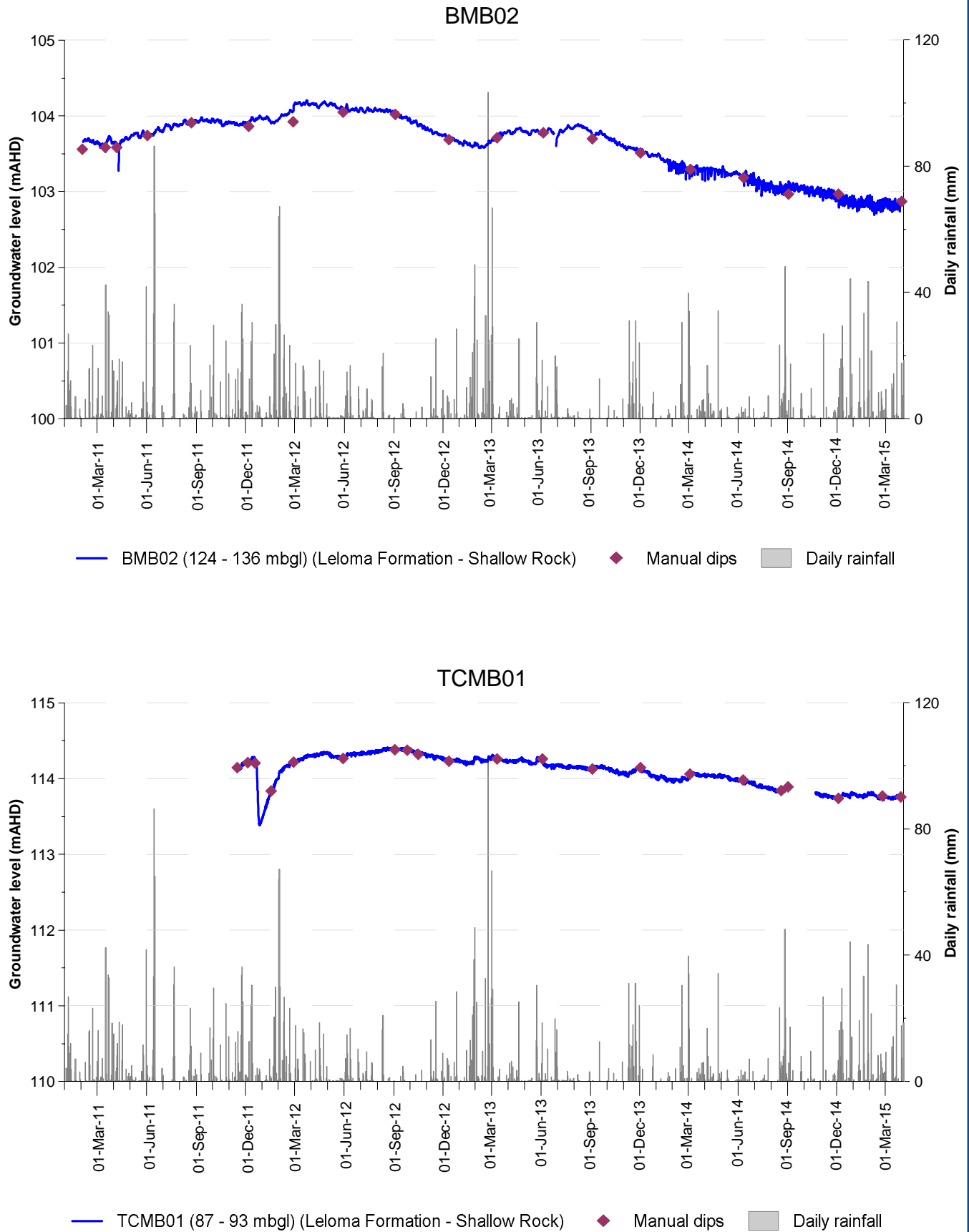


Figure A.10: BMB02 and TCMB01 monitoring bores

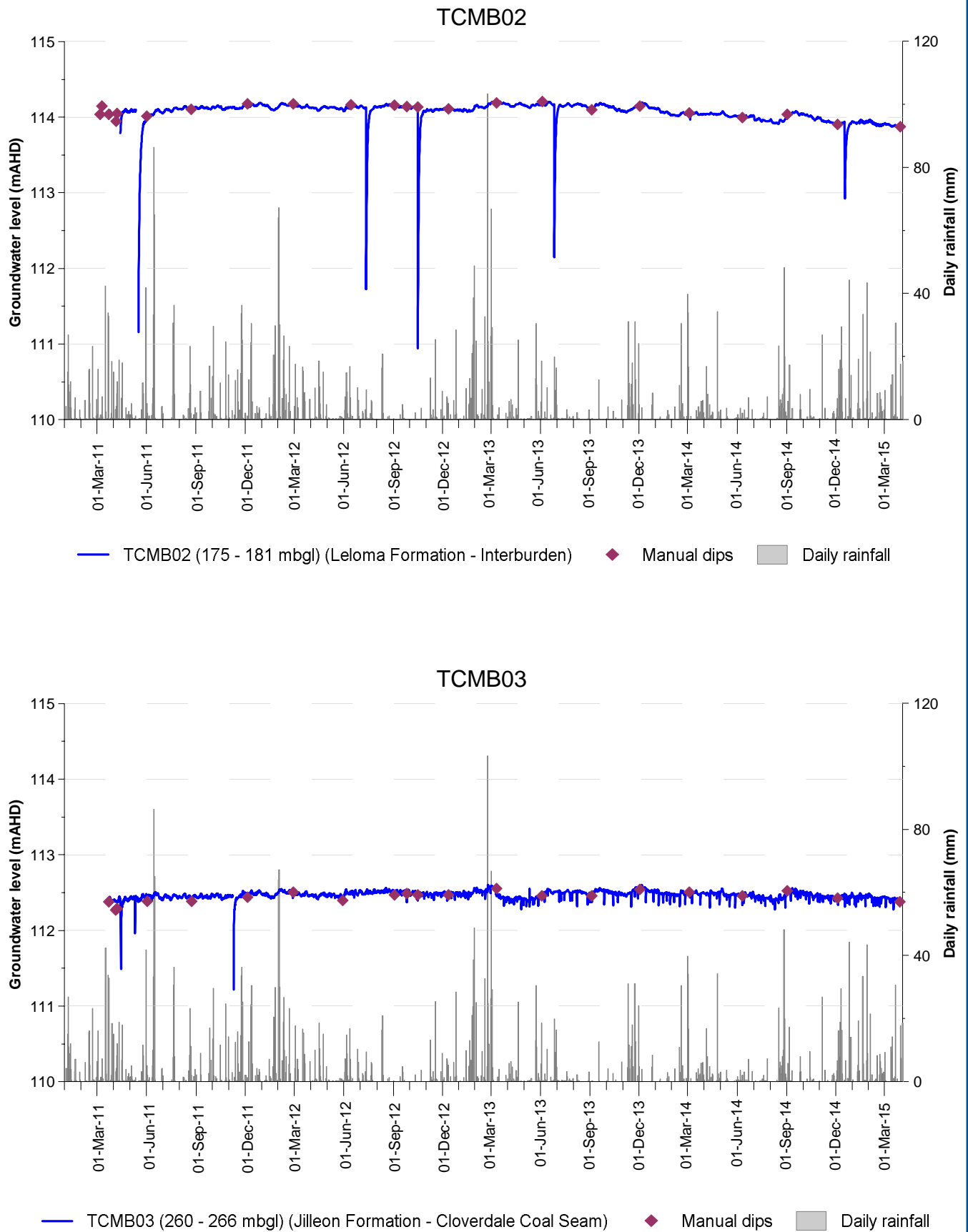


Figure A.11: TCMB02 and TCMB03 monitoring bores

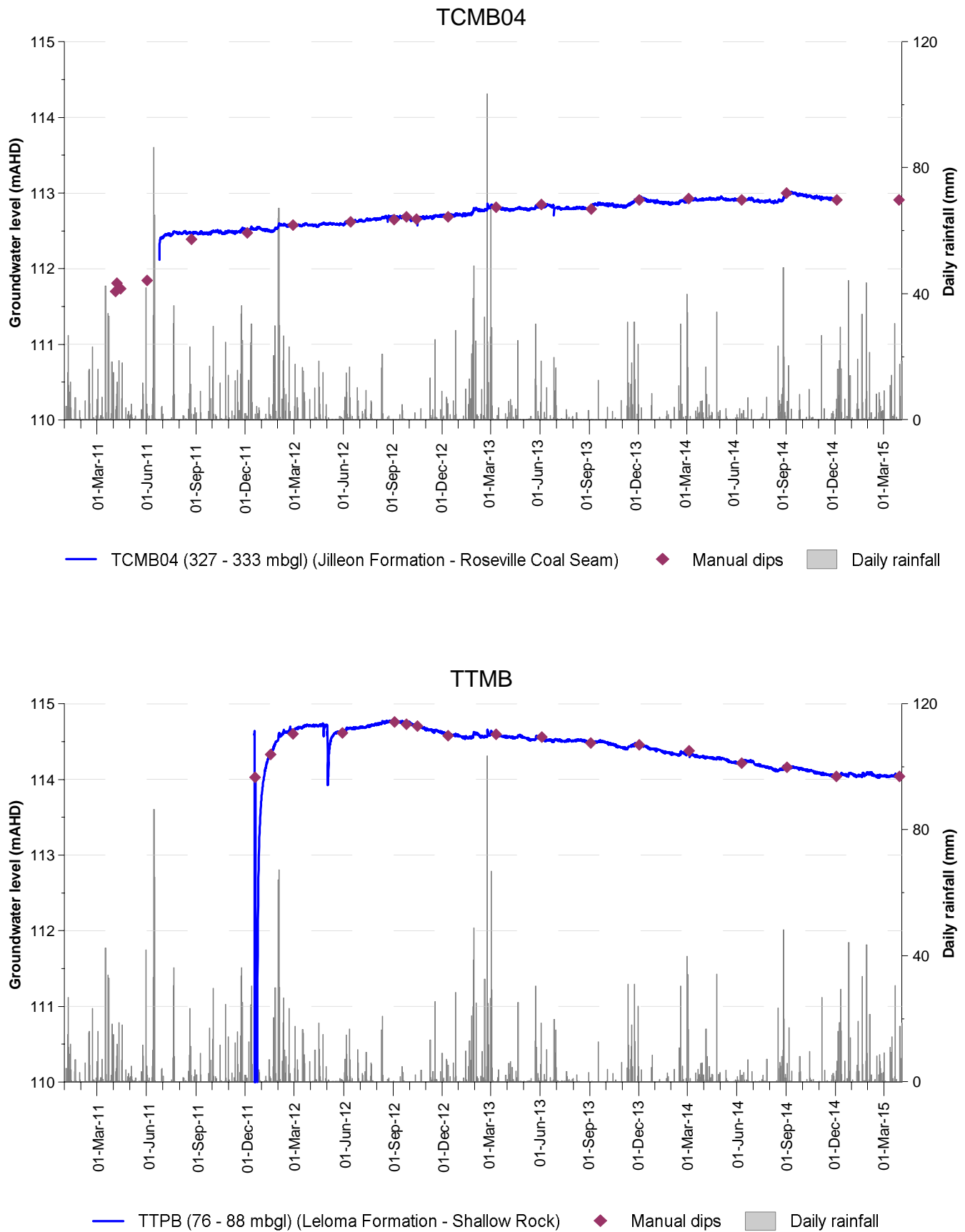


Figure A.12: TCMB04 and TTMB monitoring bores

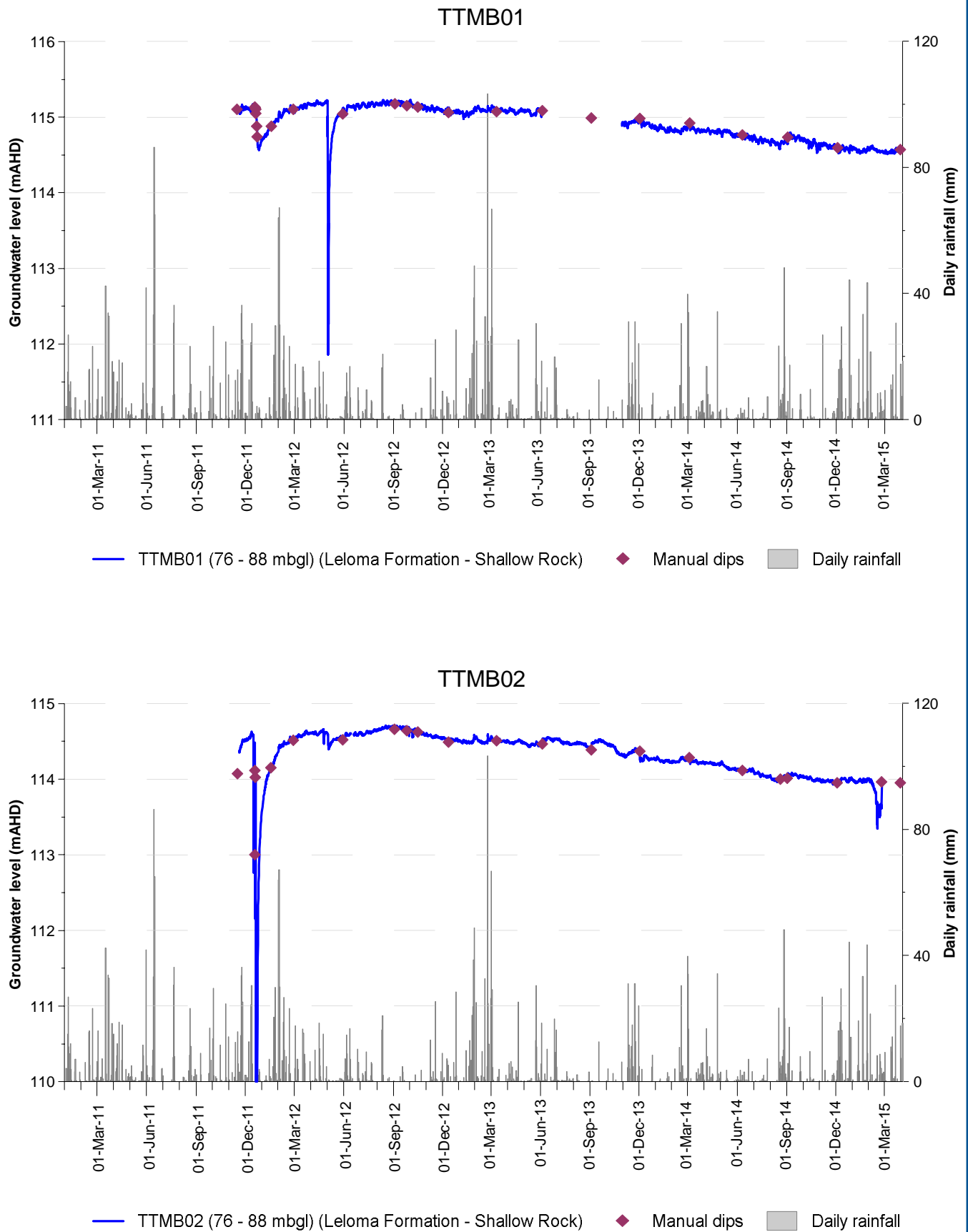


Figure A.13: TTMB01 and TTMB02 monitoring bores

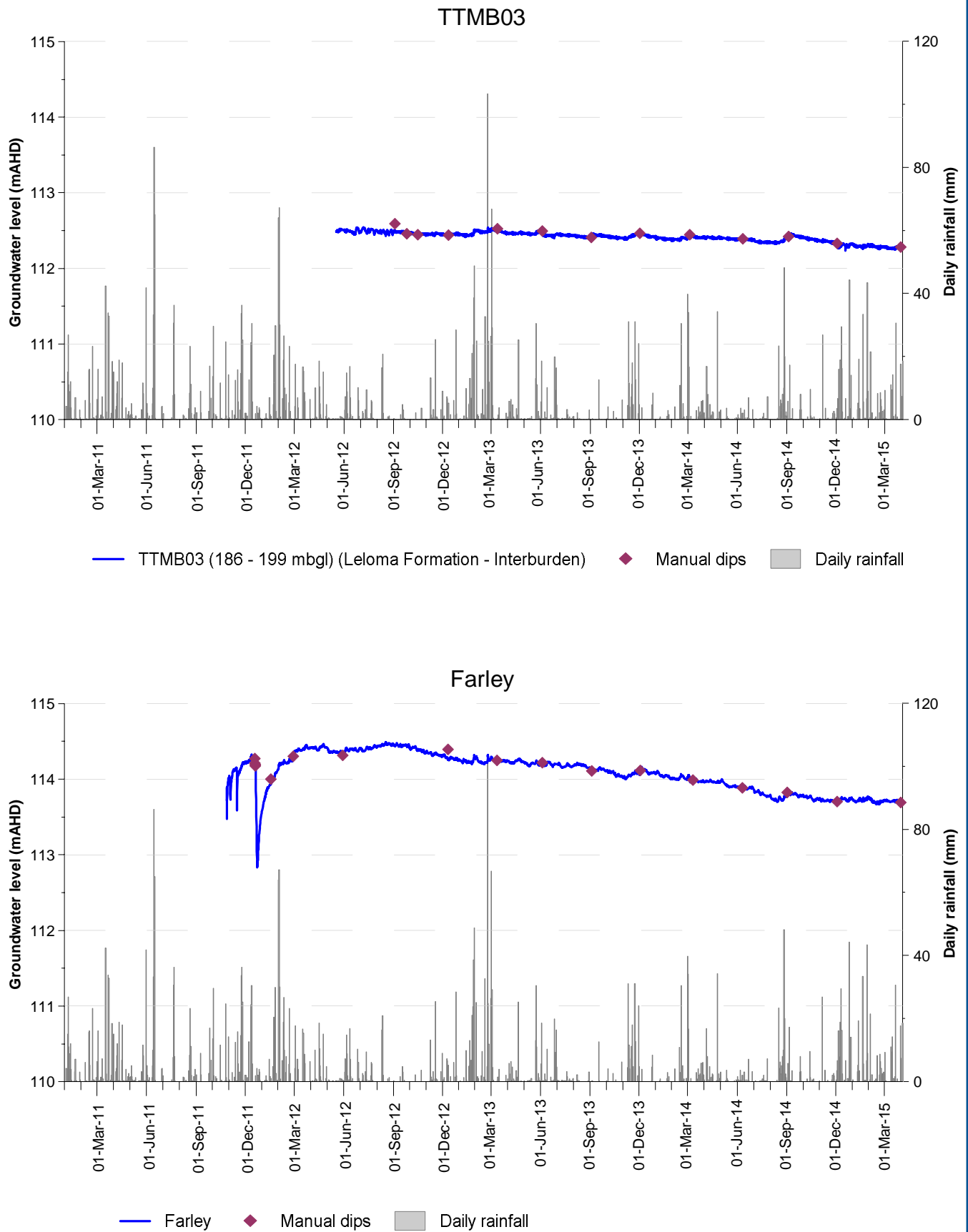


Figure A.14: TTMB03 and Farley monitoring bores

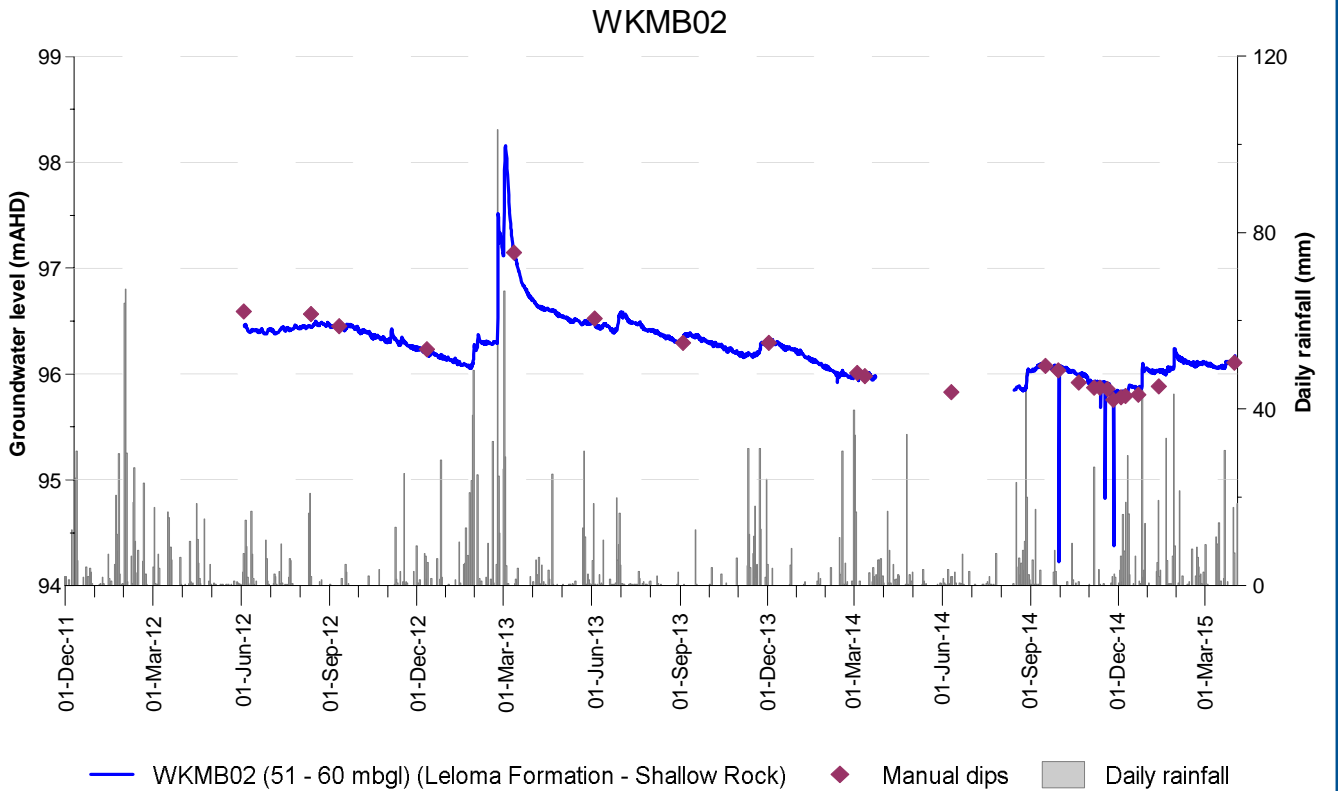
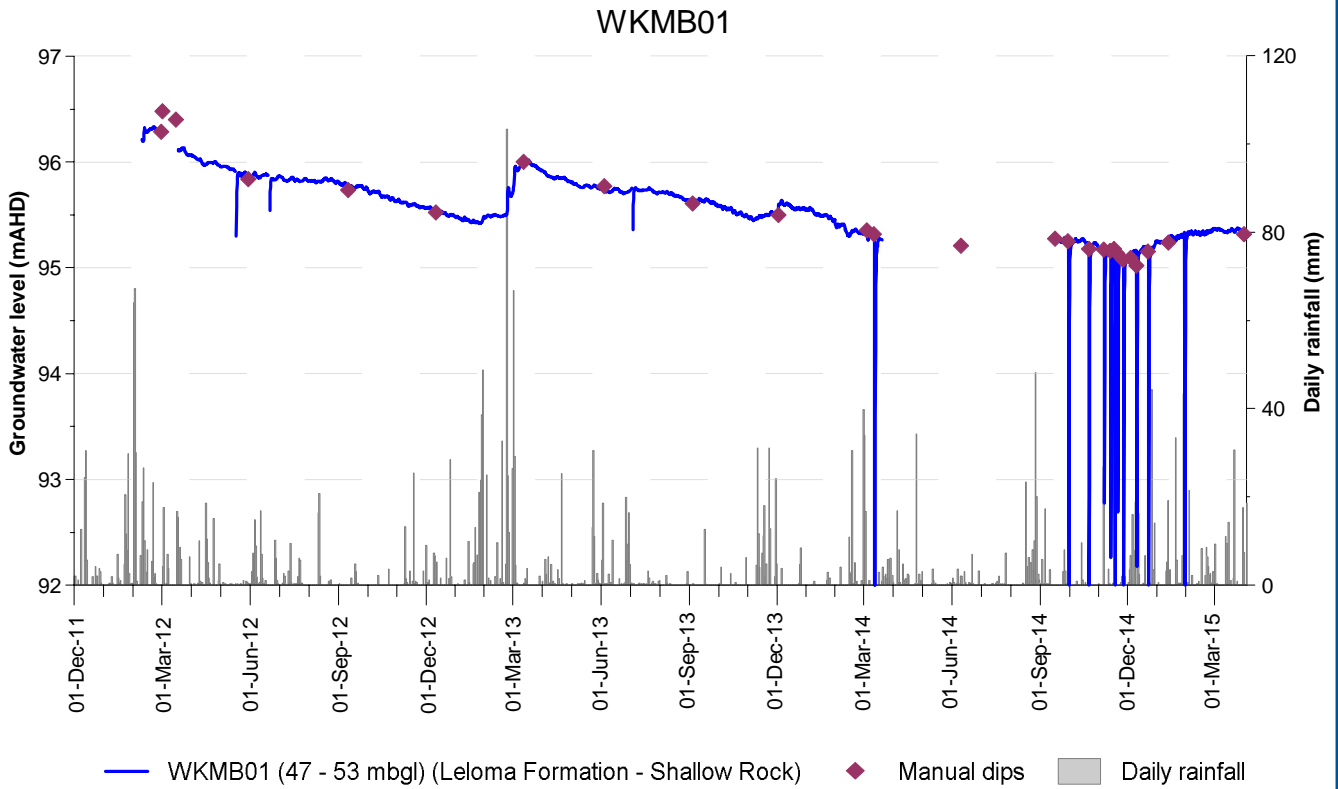


Figure A.15: WKMB01 and WKMB02 monitoring bores

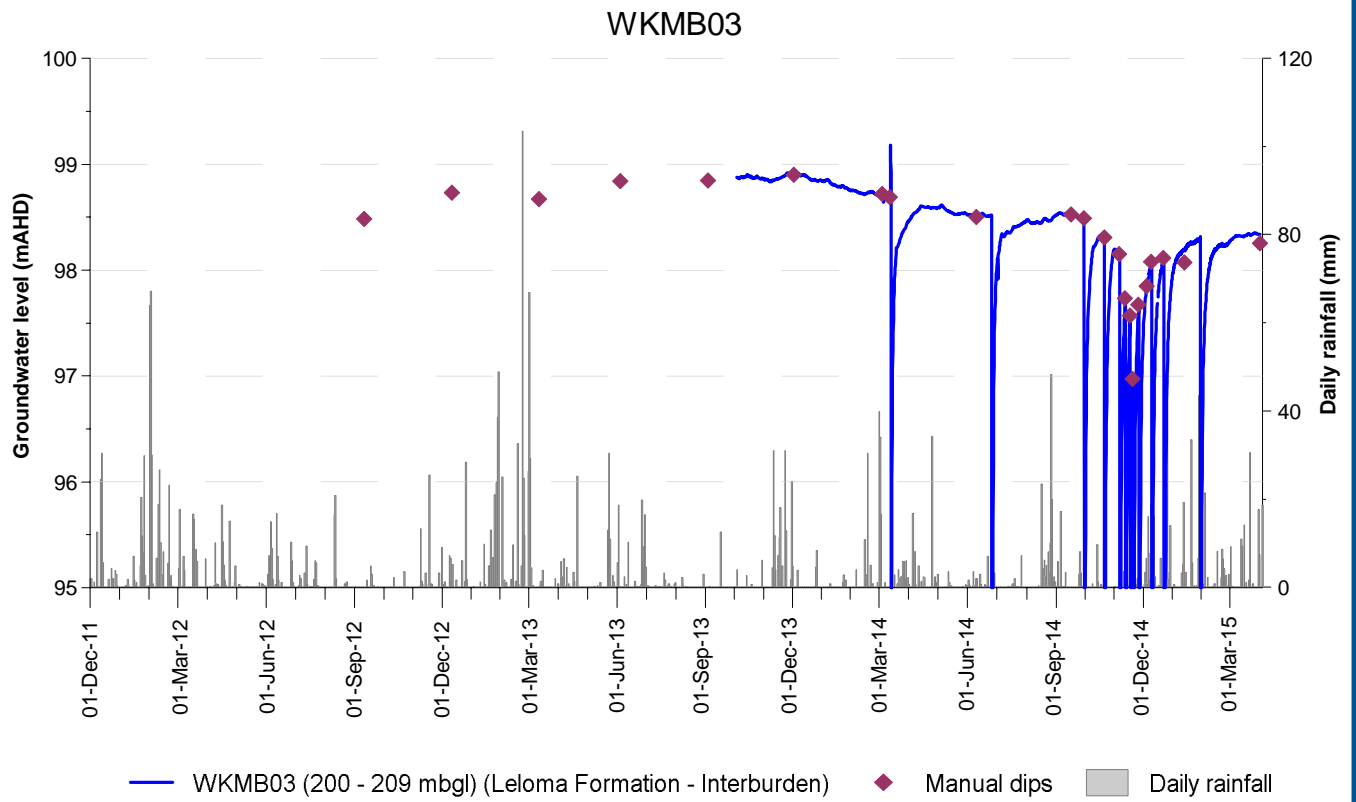


Figure A.16: WKMB03 monitoring bore

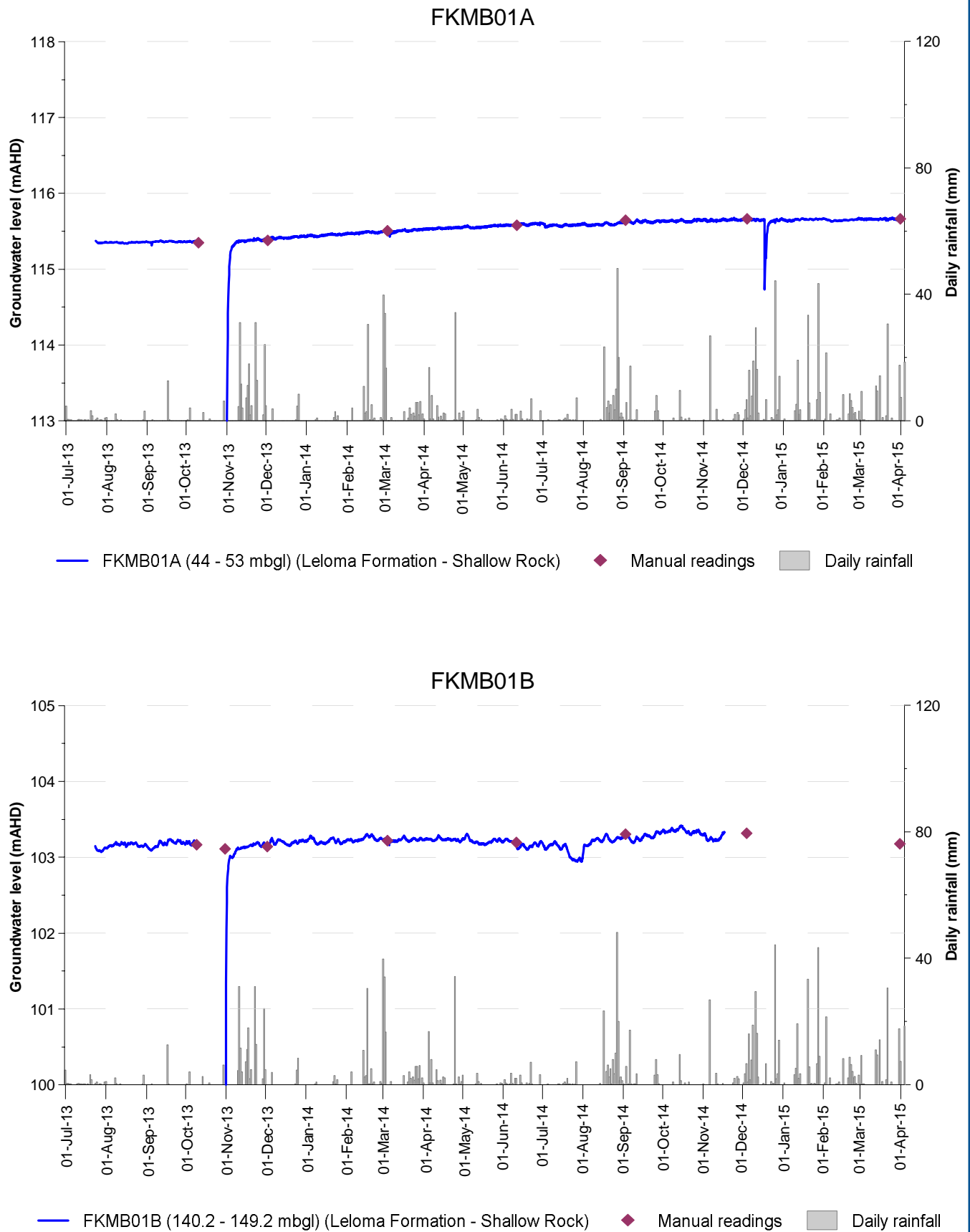


Figure A.17: FKMB01A and FKMB01B monitoring bores

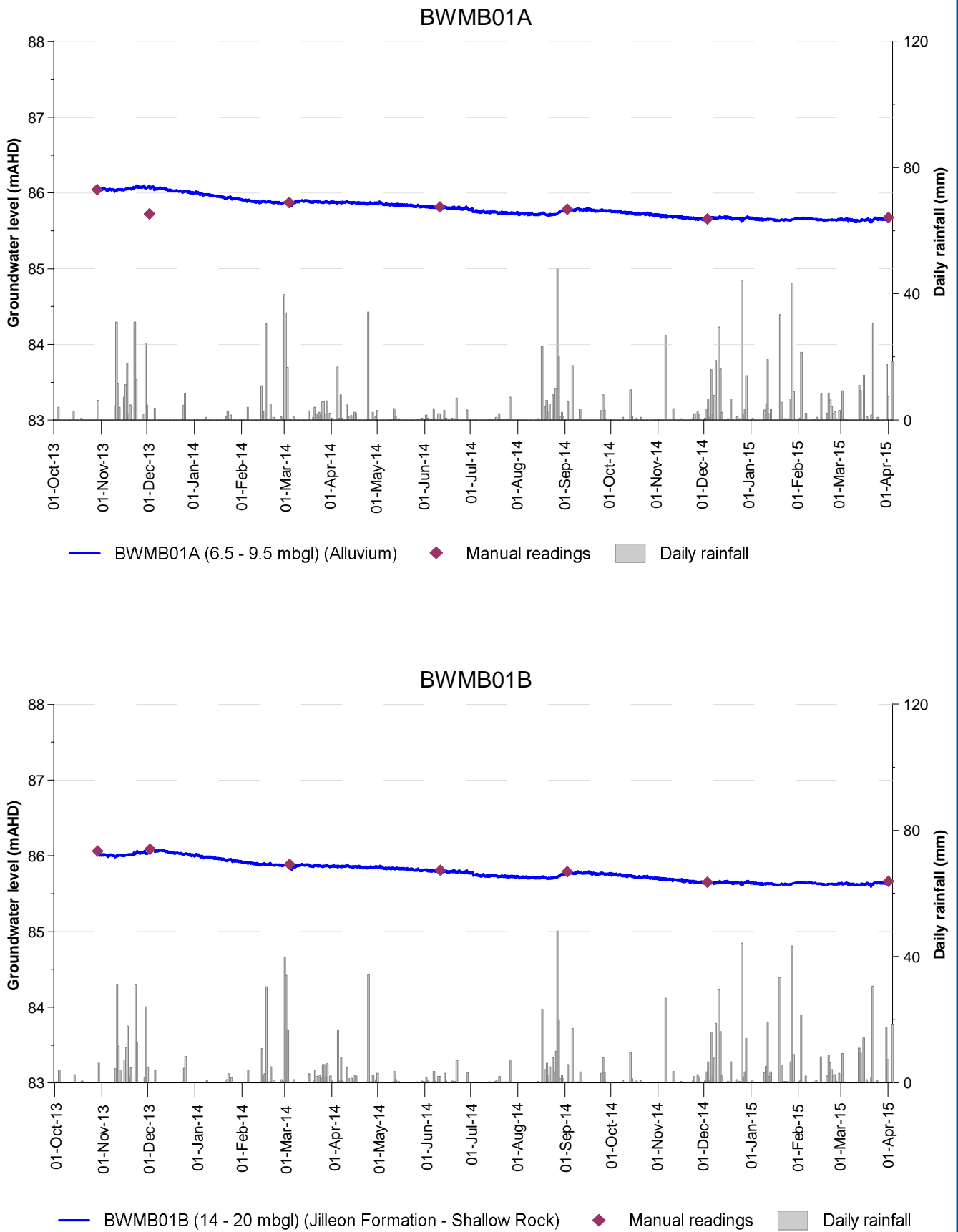


Figure A.18: BWMB01A and BWMB01B monitoring bores

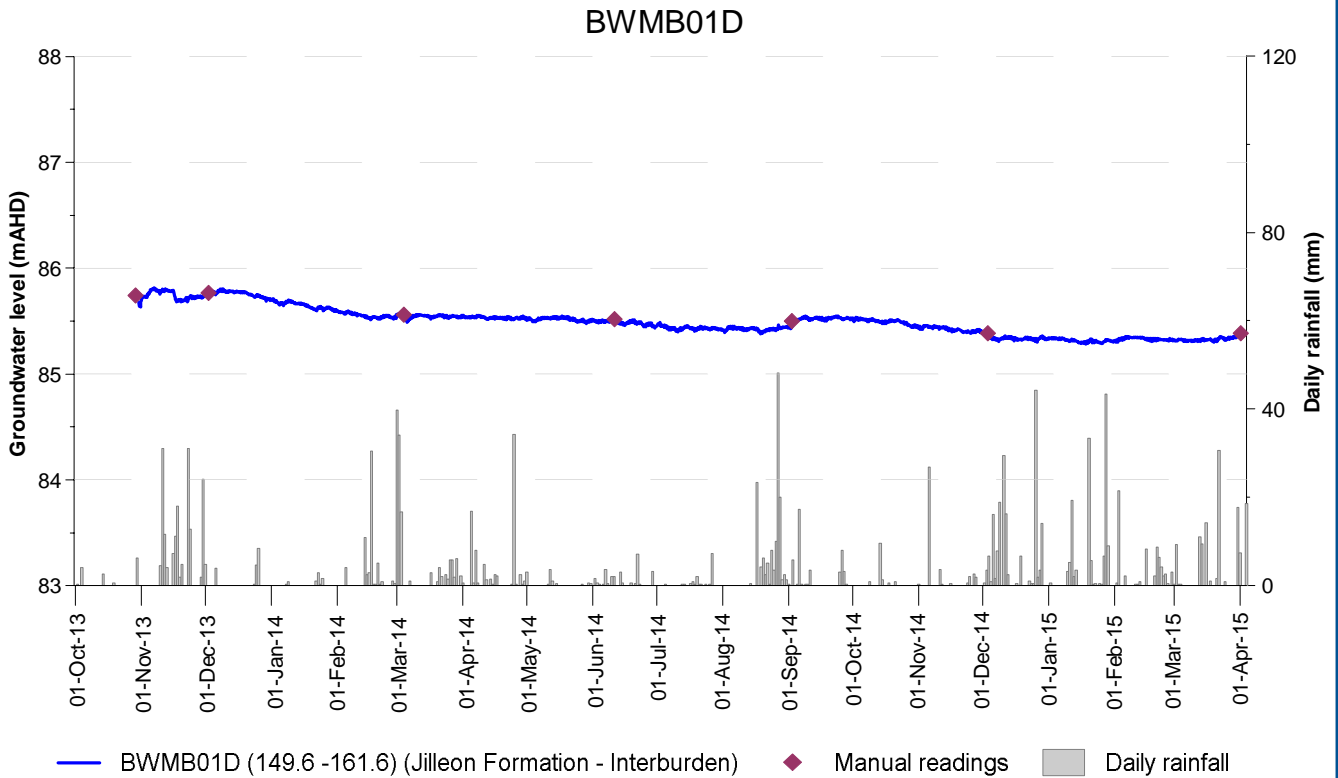
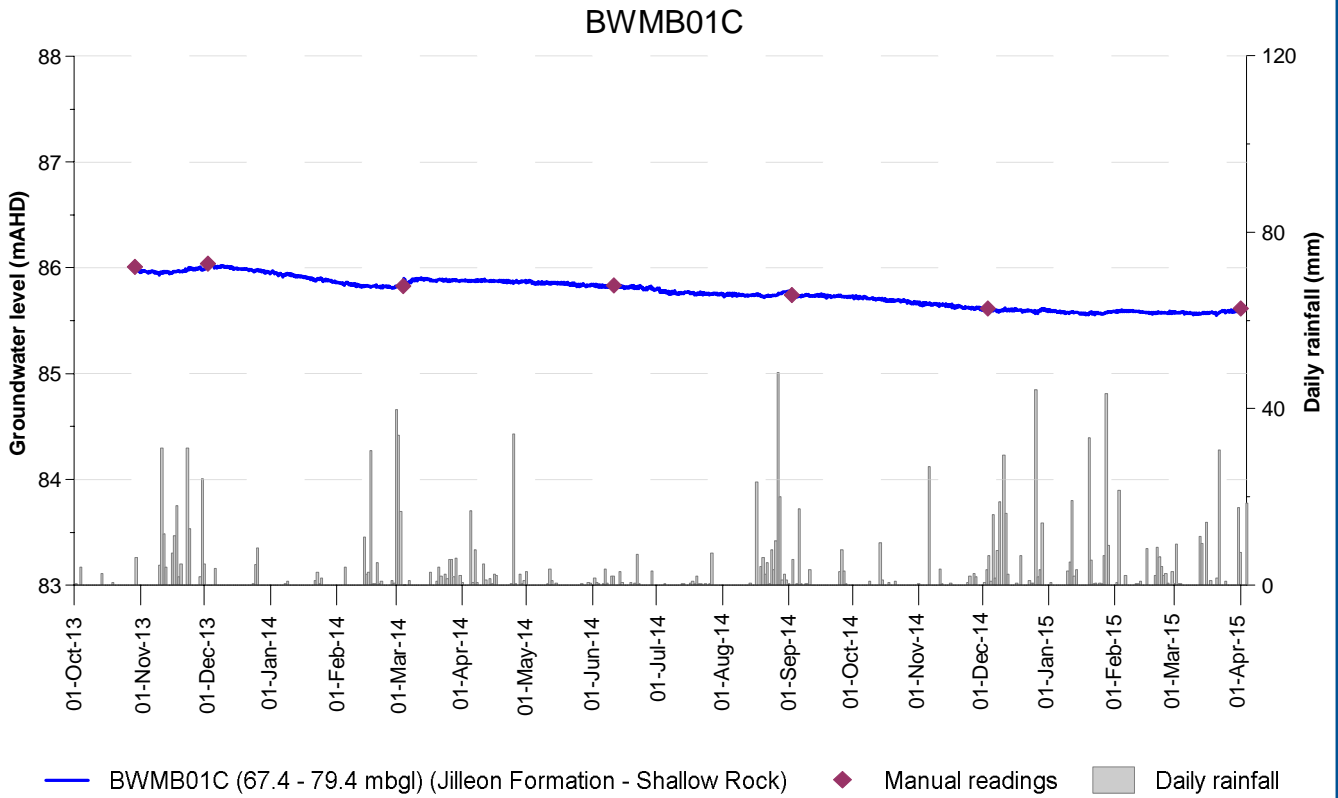


Figure A.19: BWMB01C and BWMB01D monitoring bores

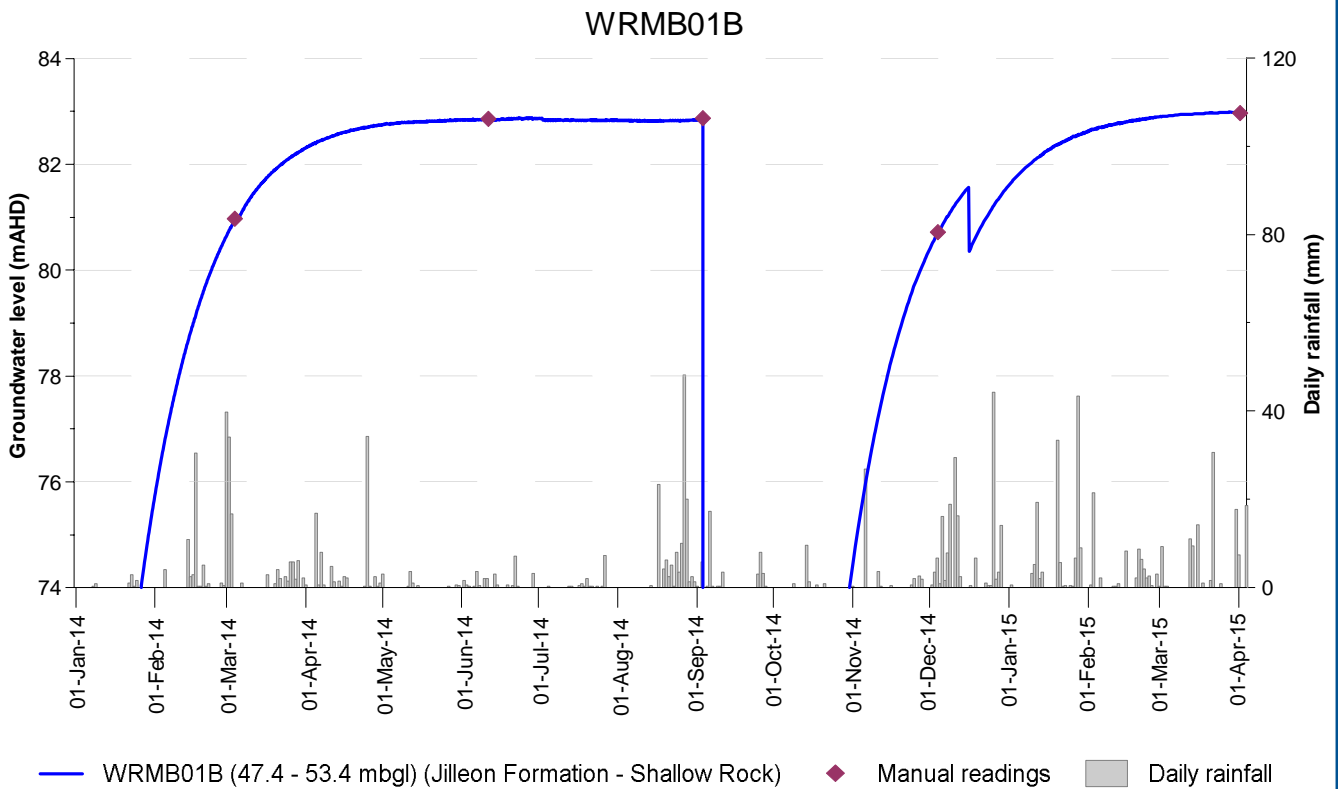
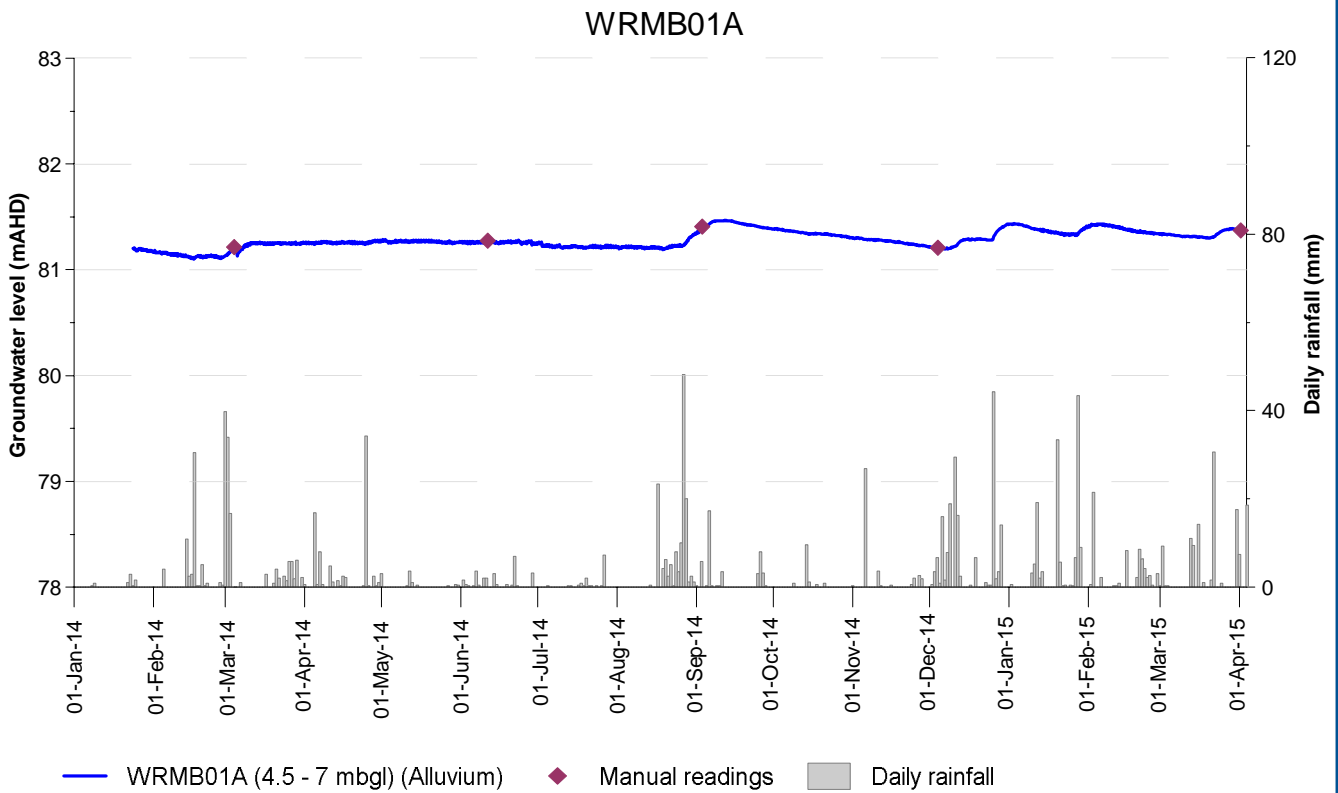


Figure A.20: WRMB01A and WRMB01B monitoring bores

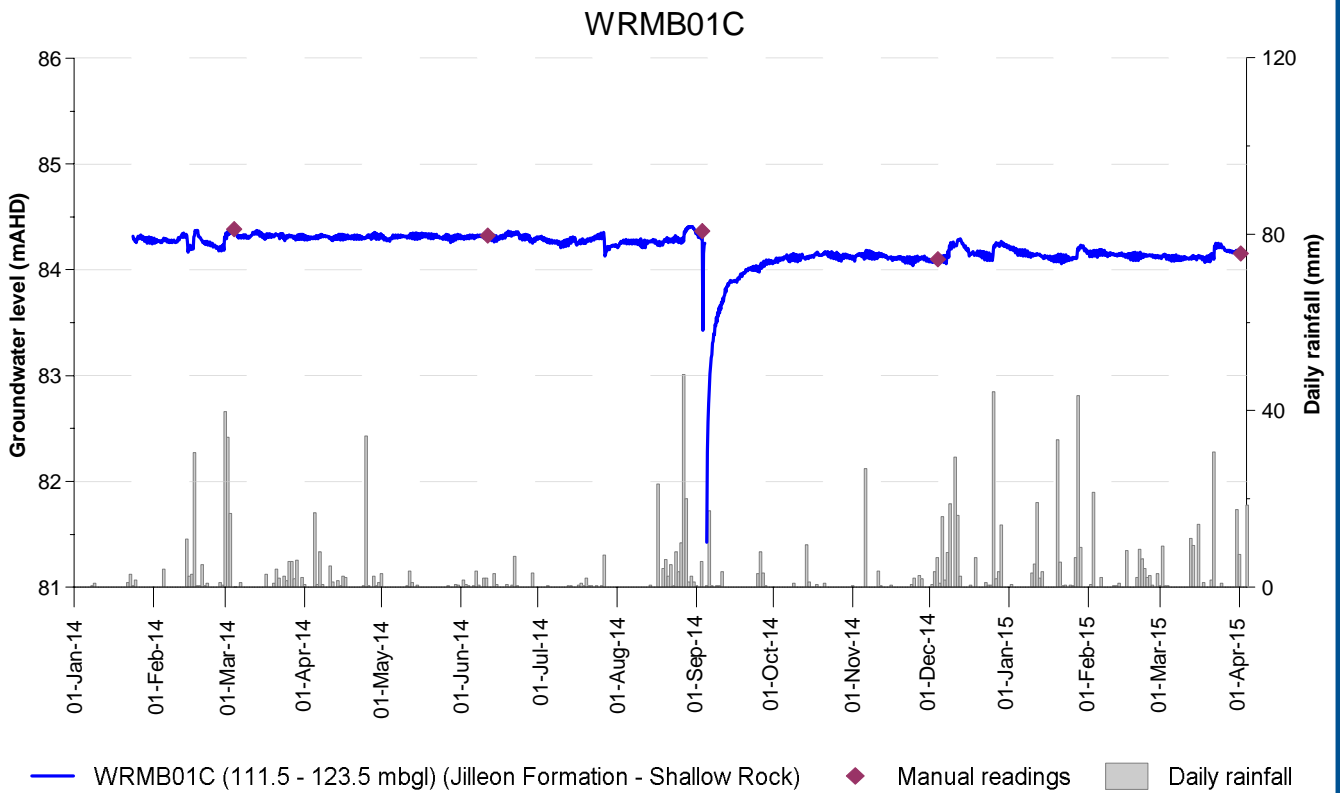


Figure A.21: WRMB01C monitoring bore

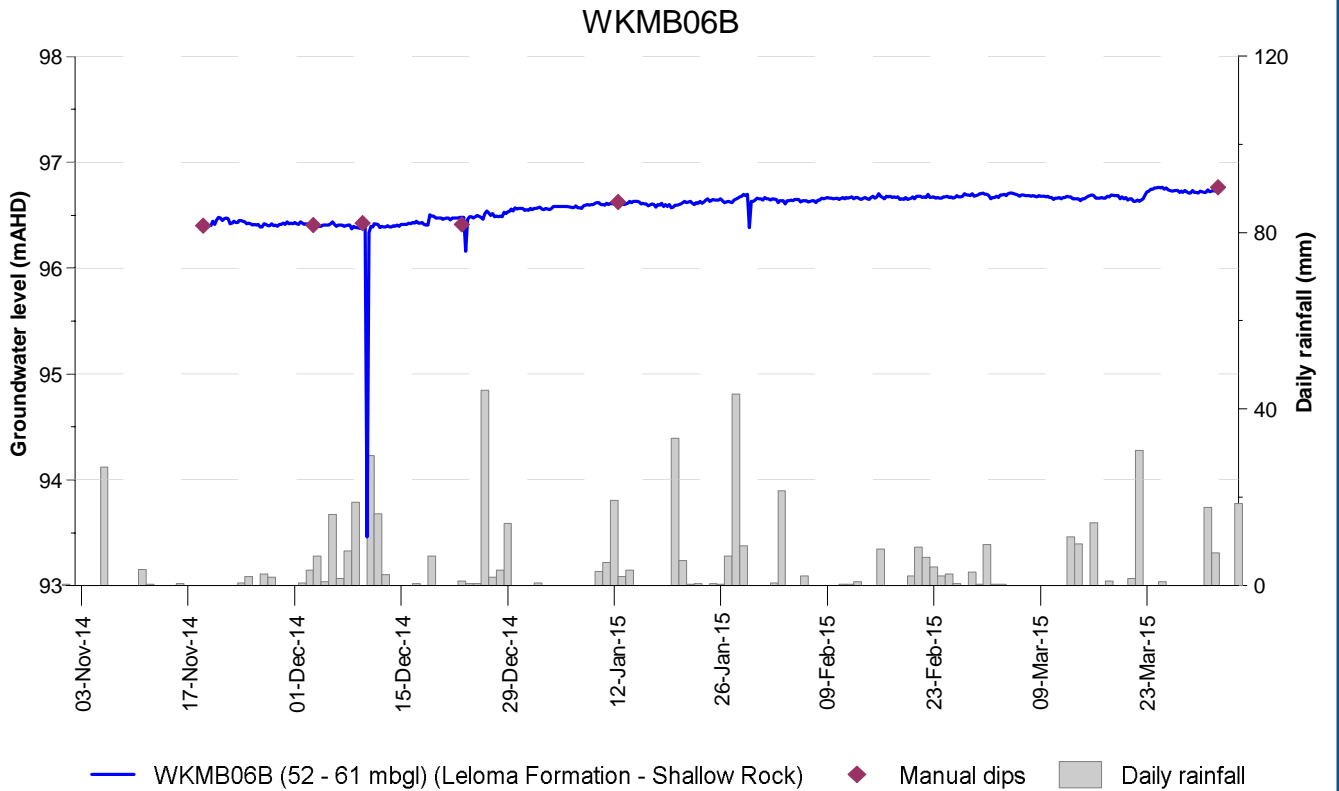
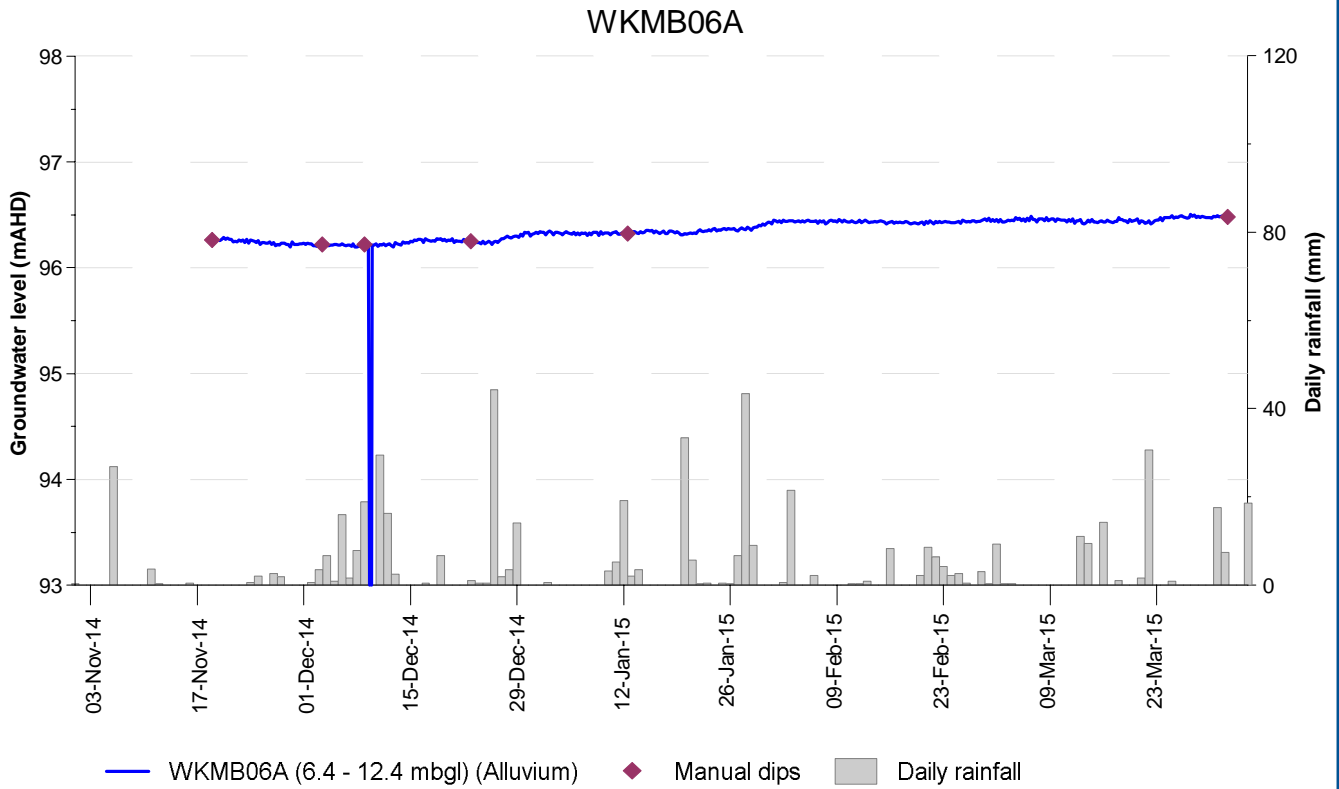


Figure A.22: WKMB06A and WKMB06B monitoring bores

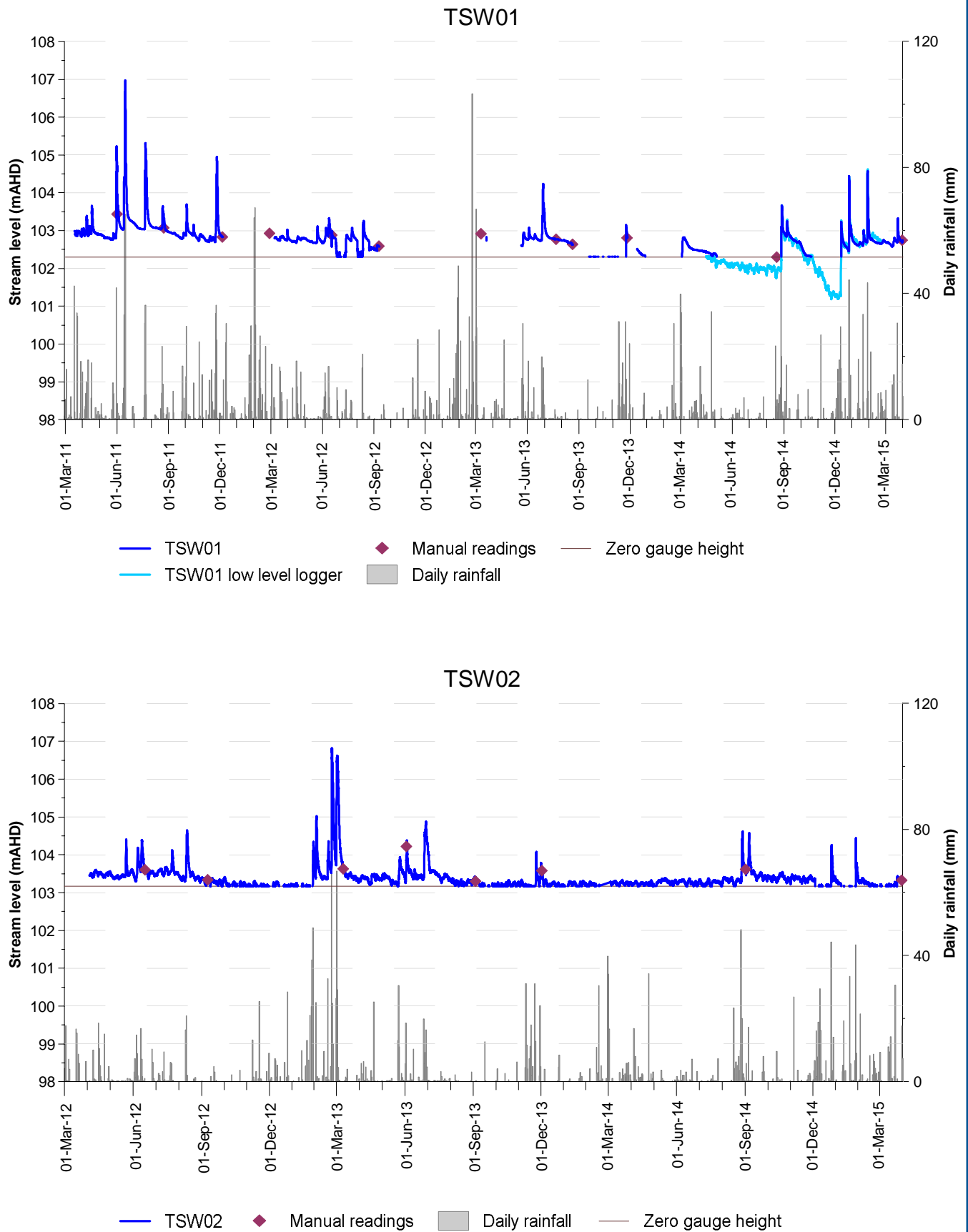


Figure A.23: TSW01 and TSW02 stream levels

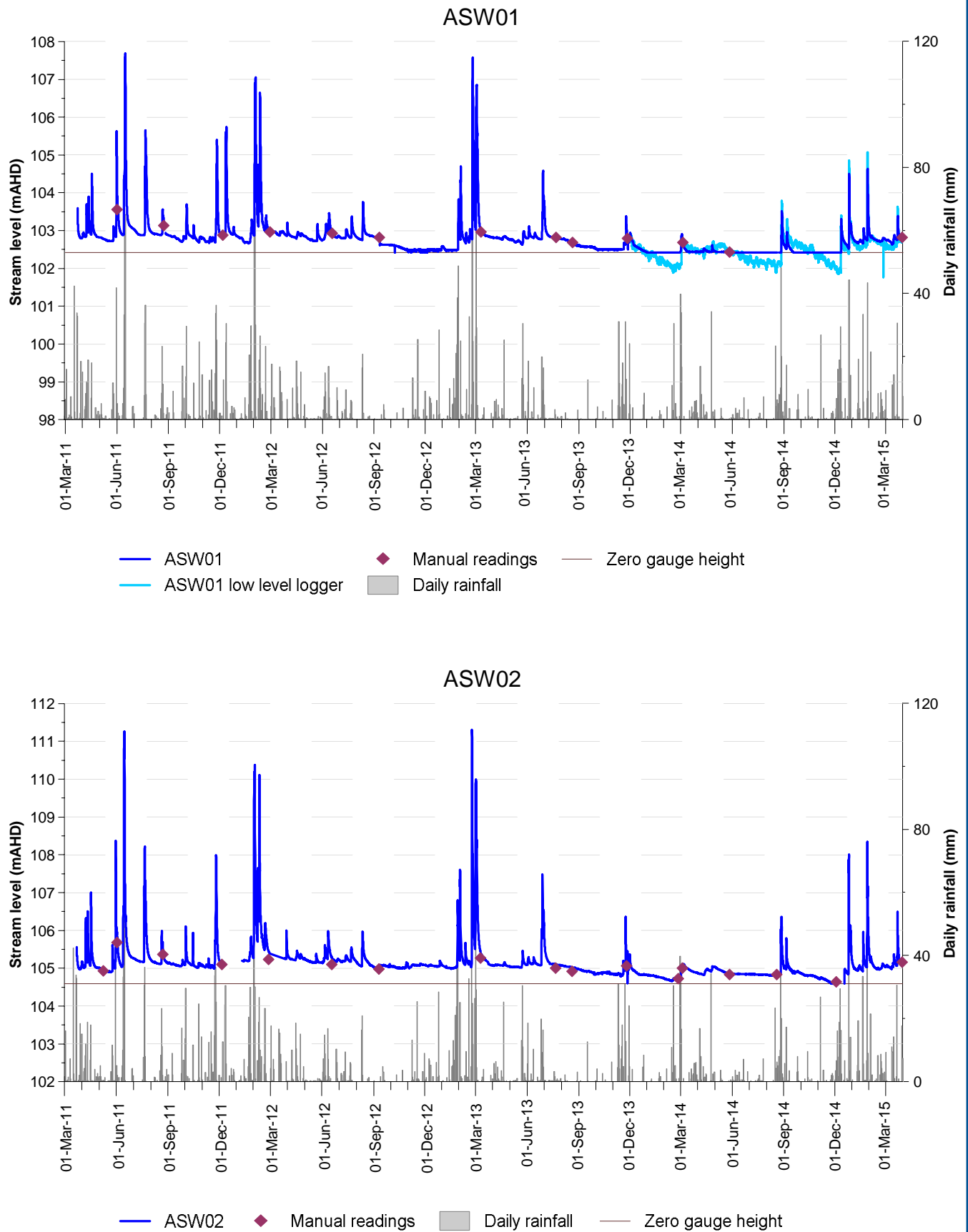


Figure A.24: ASW01 and ASW02 stream levels

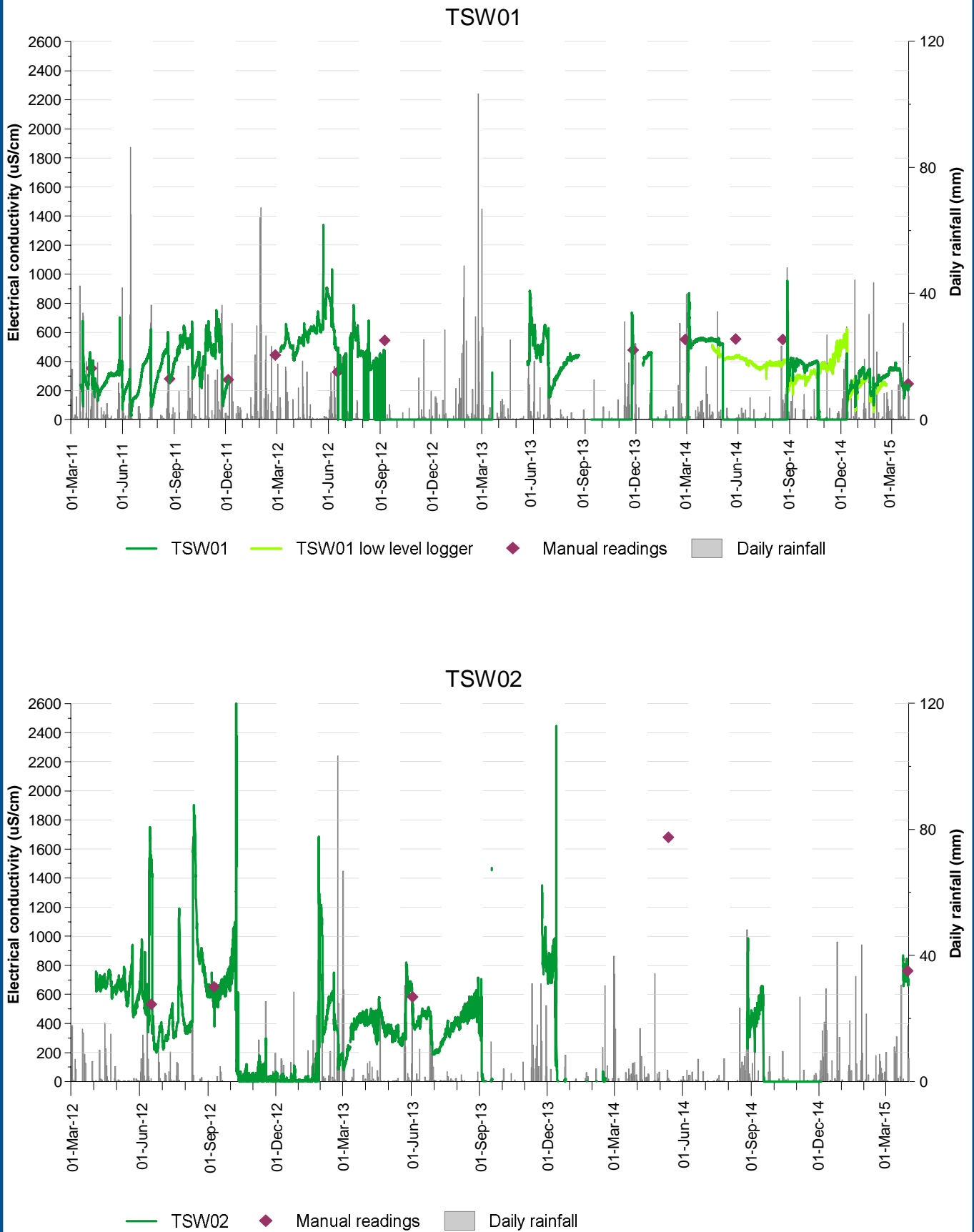
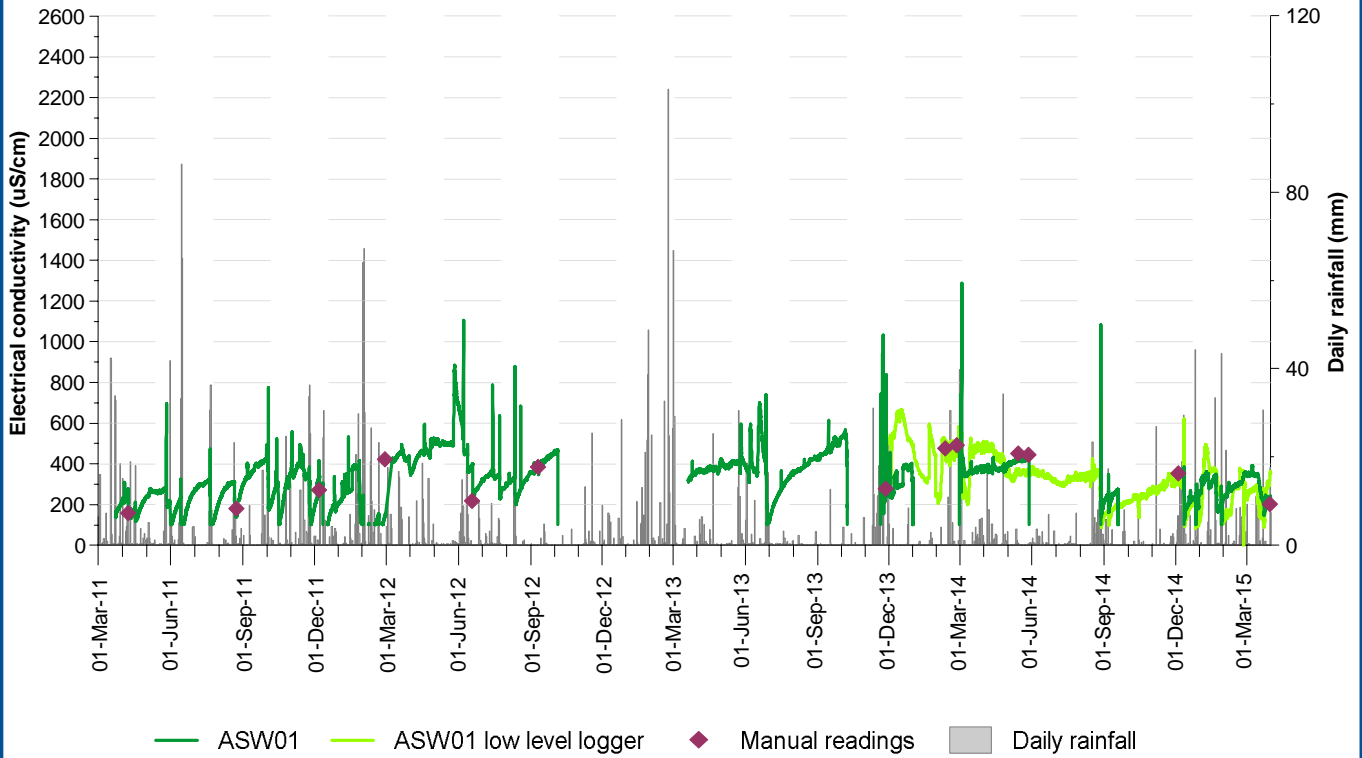


Figure A.25: TSW01 and TSW02 electrical conductivity

ASW01



ASW02

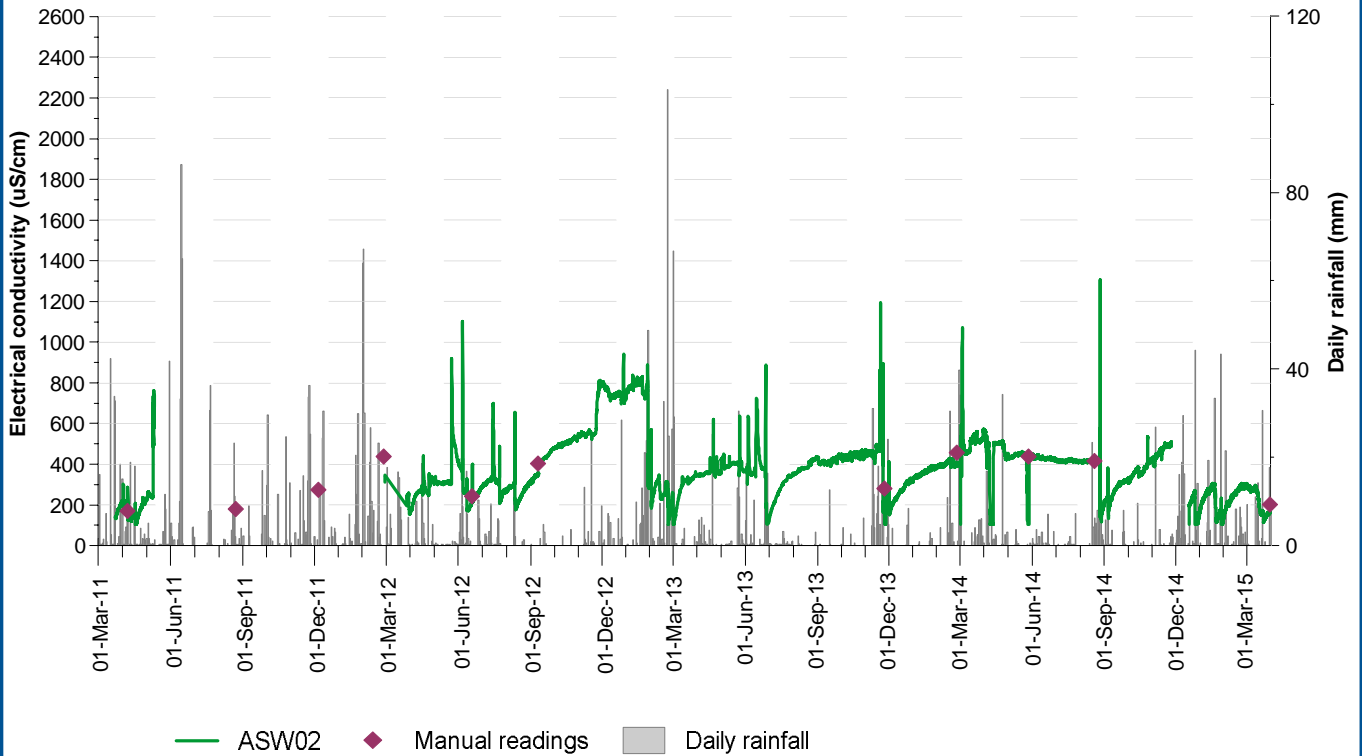


Figure A.26: ASW01 and ASW02 electrical conductivity

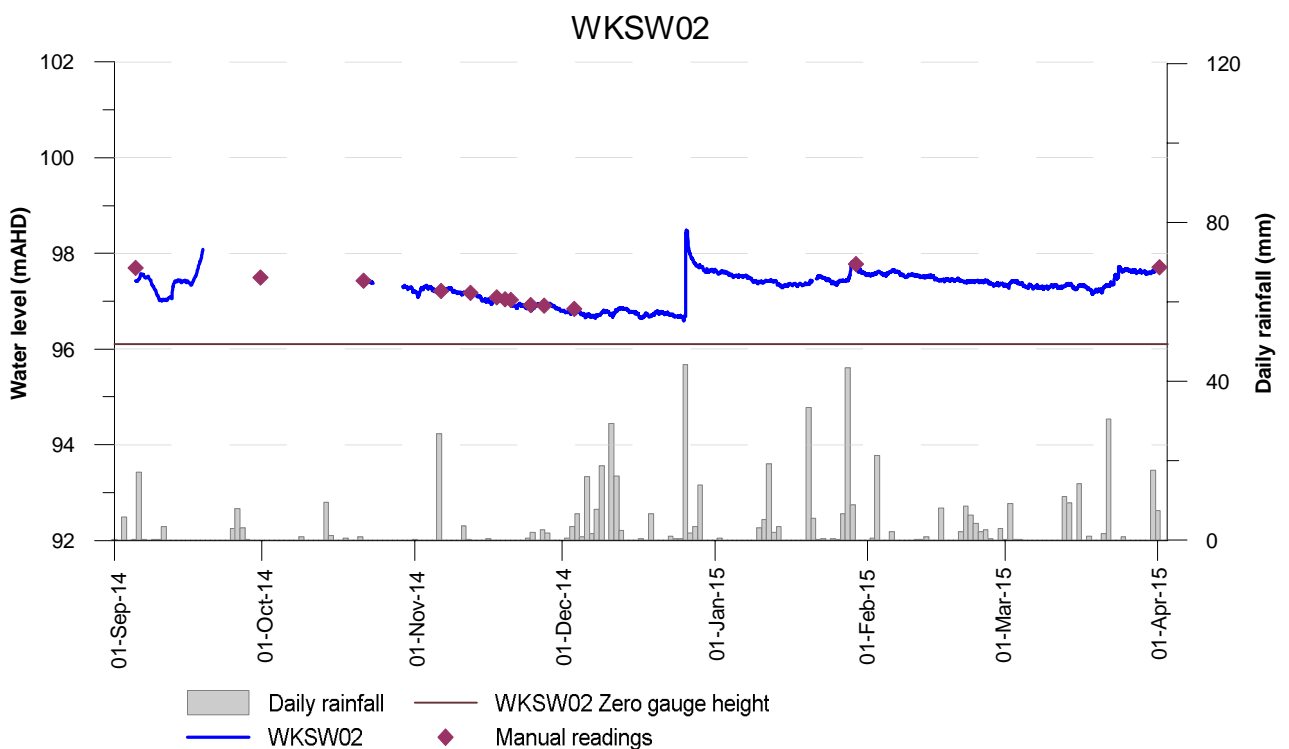
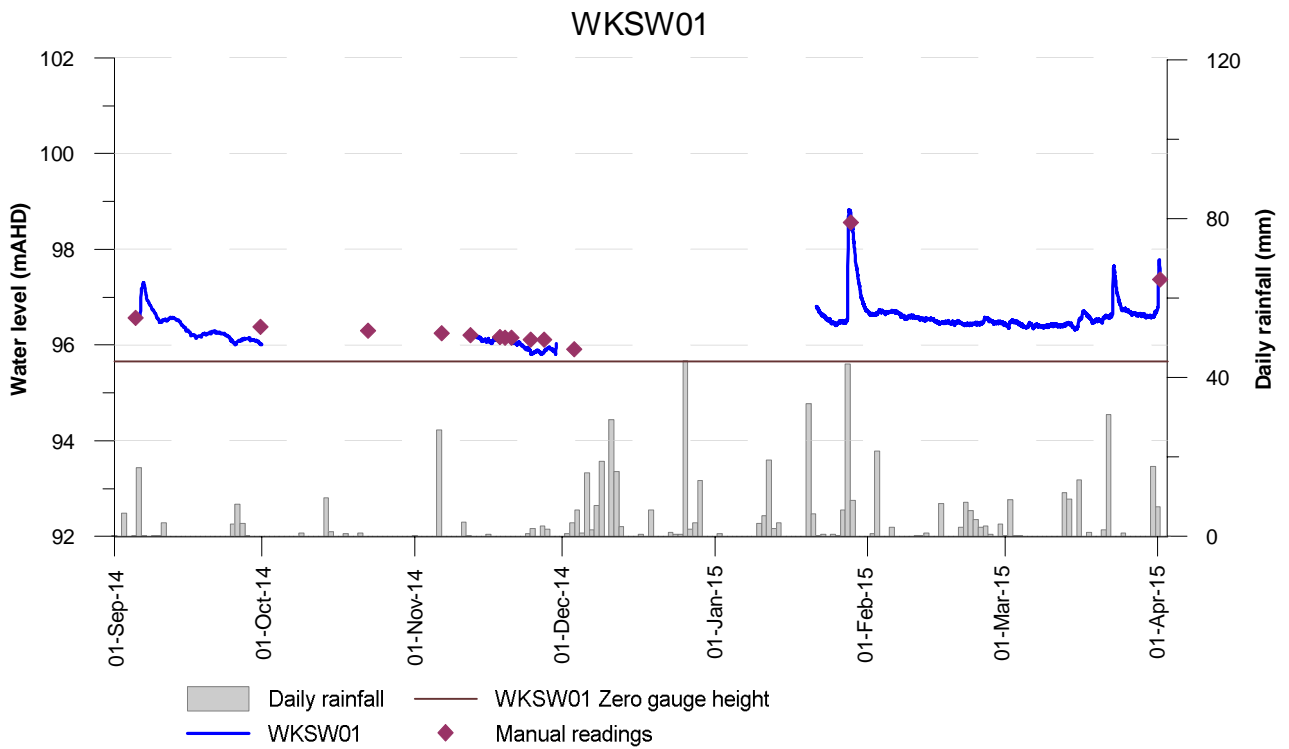


Figure A.27: WKSW01 and WKSW02 stream levels

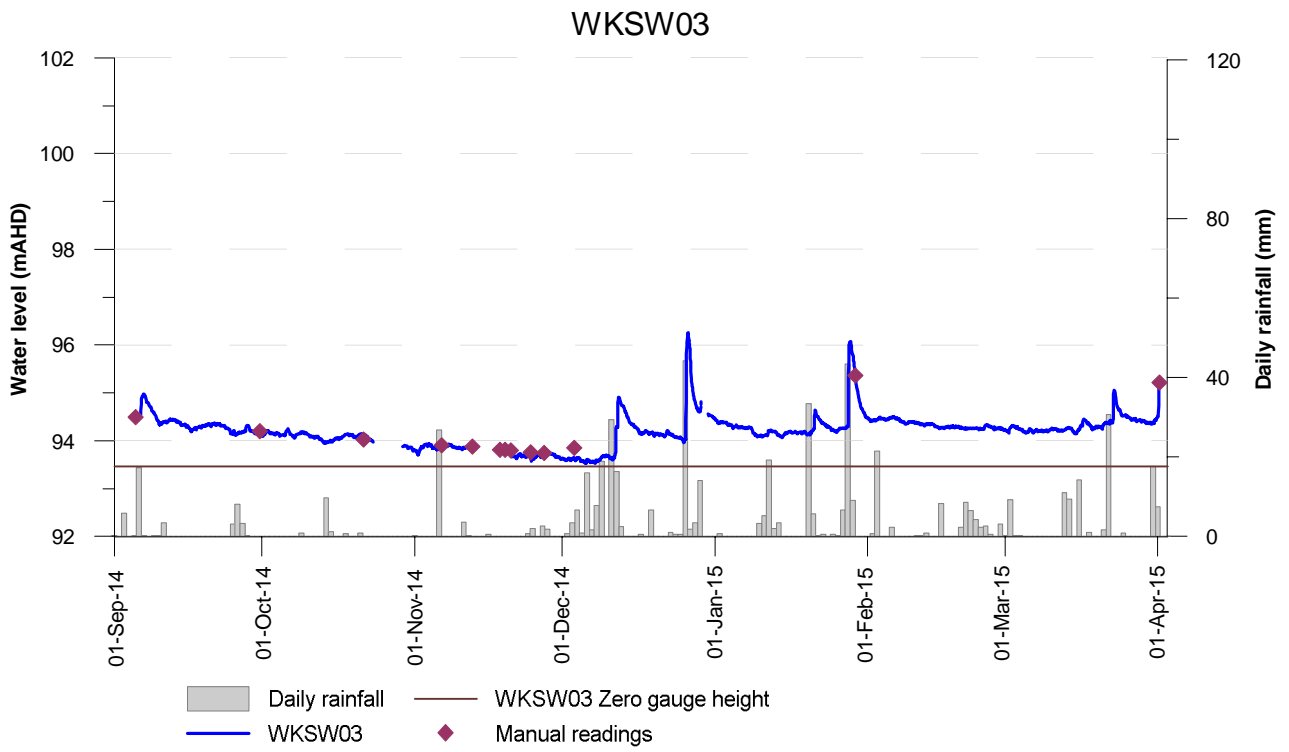


Figure A.28: WWSW03 stream levels

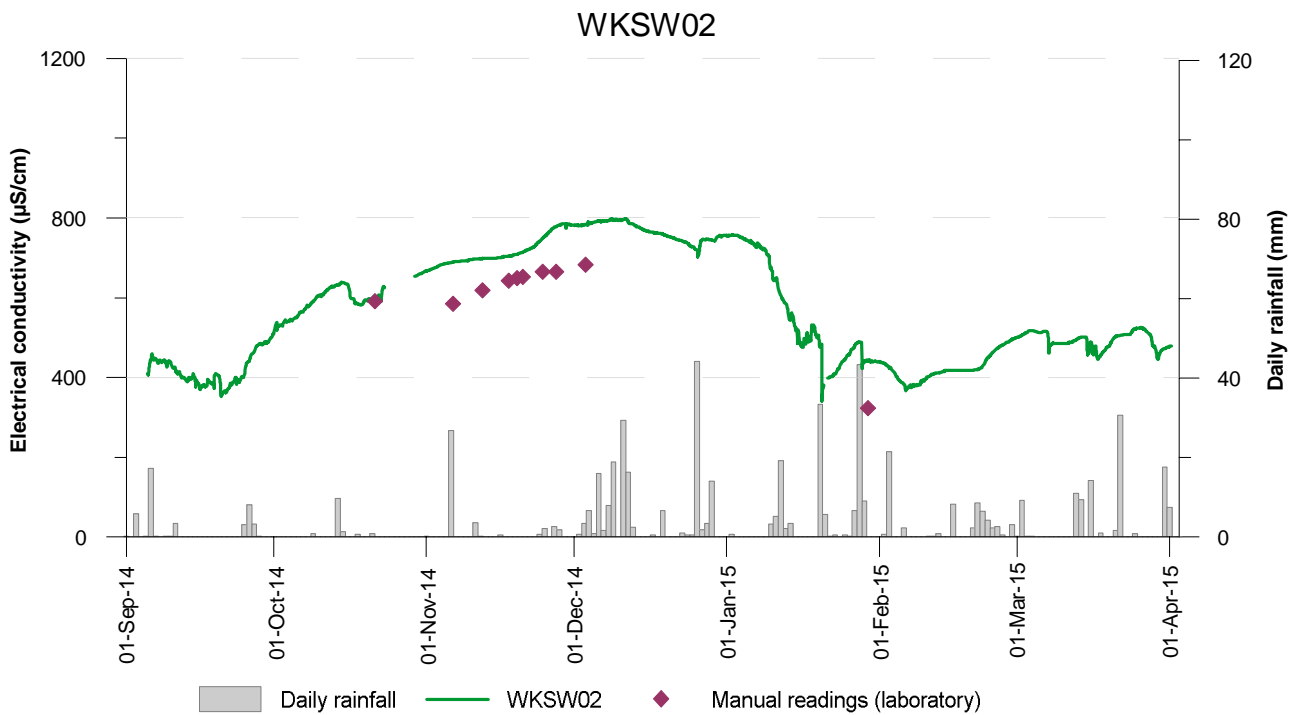
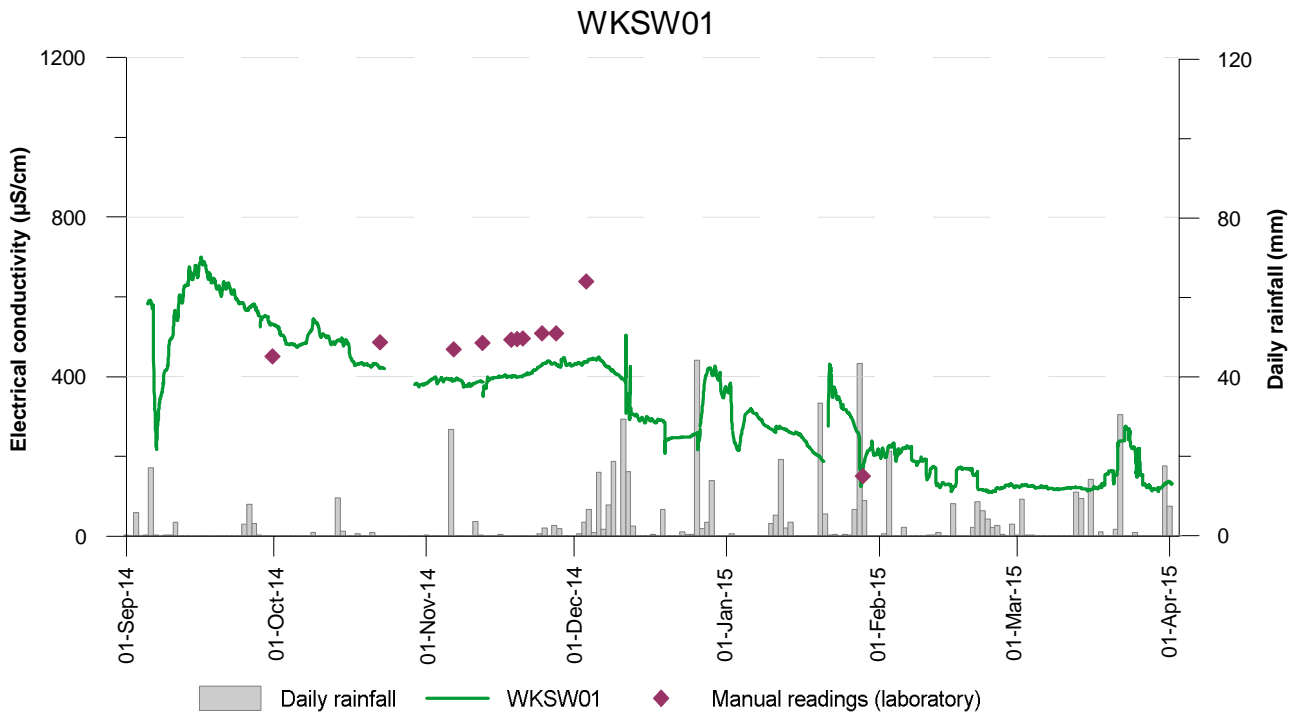


Figure A.29: WKSW01 and WKSW02 electrical conductivity

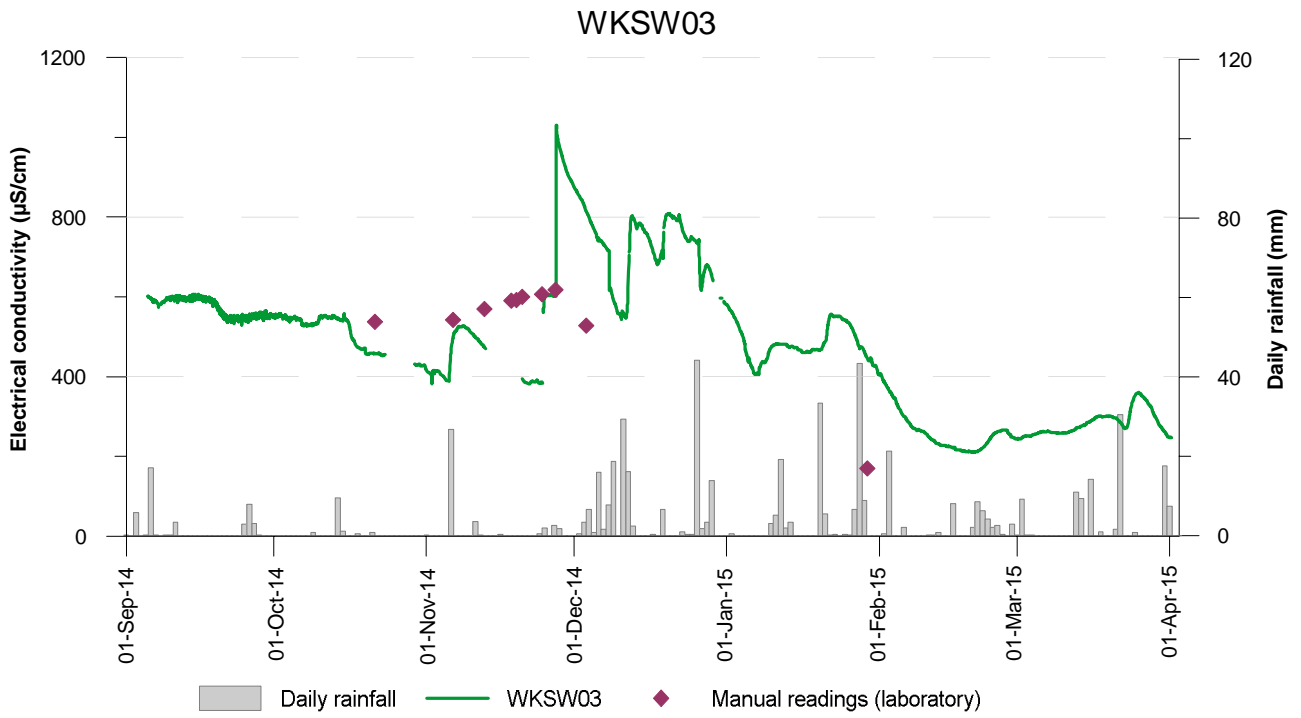


Figure A.30: WKSW03 electrical conductivity

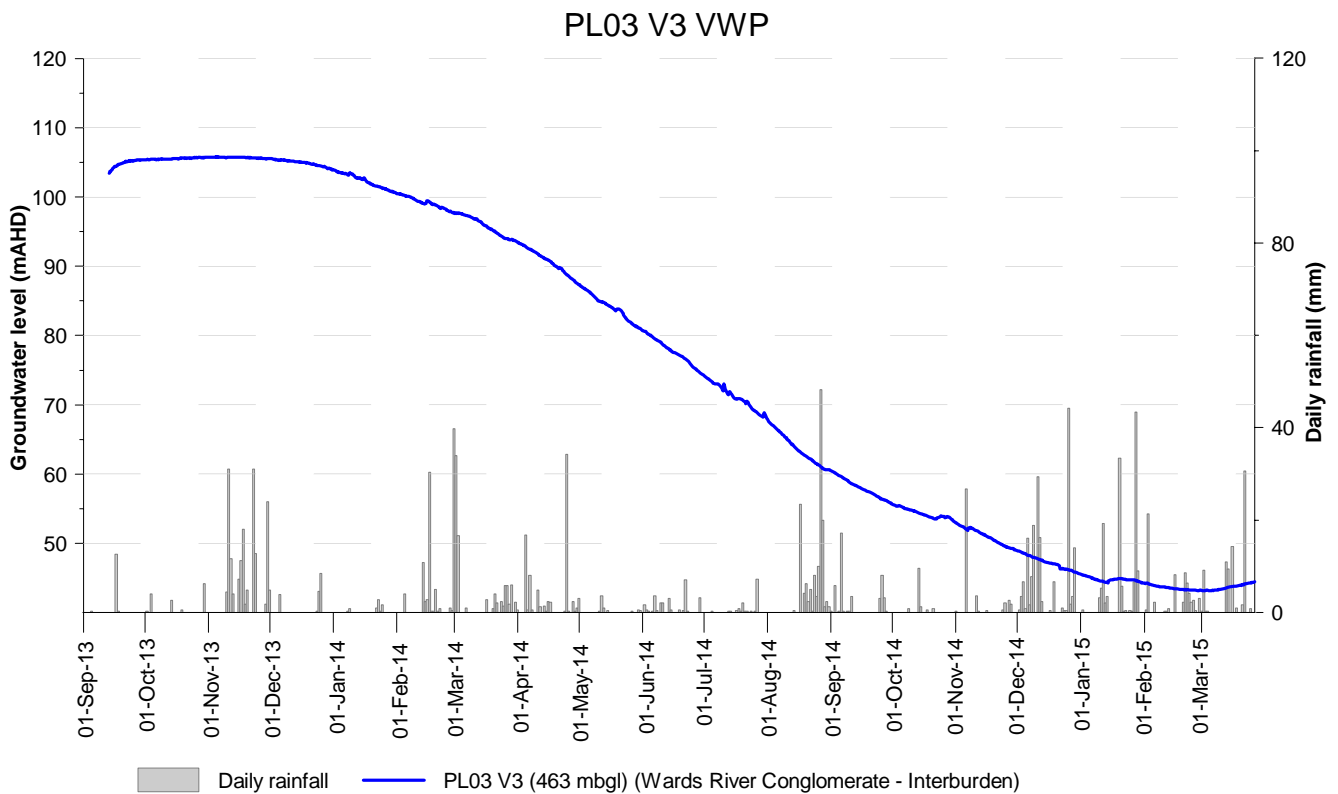
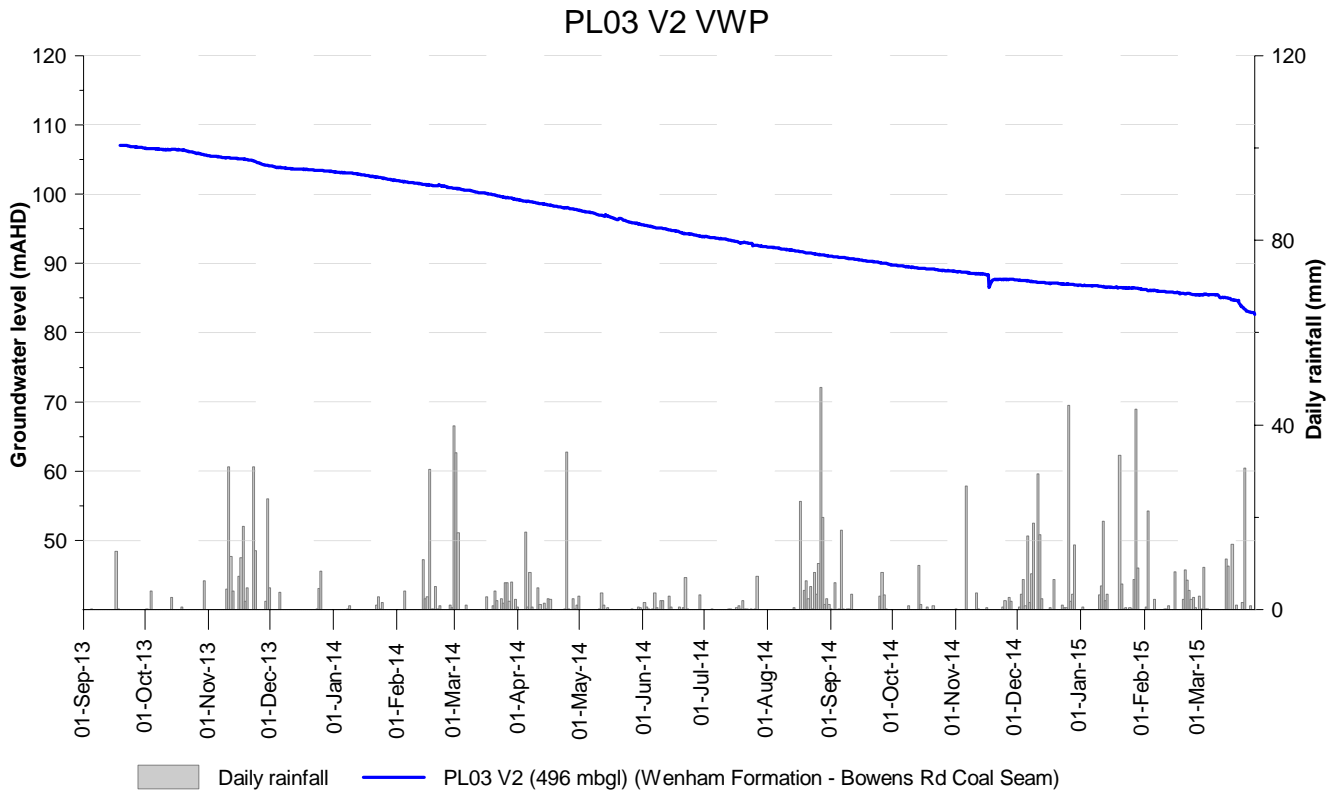


Figure A.31: PL03 VWP

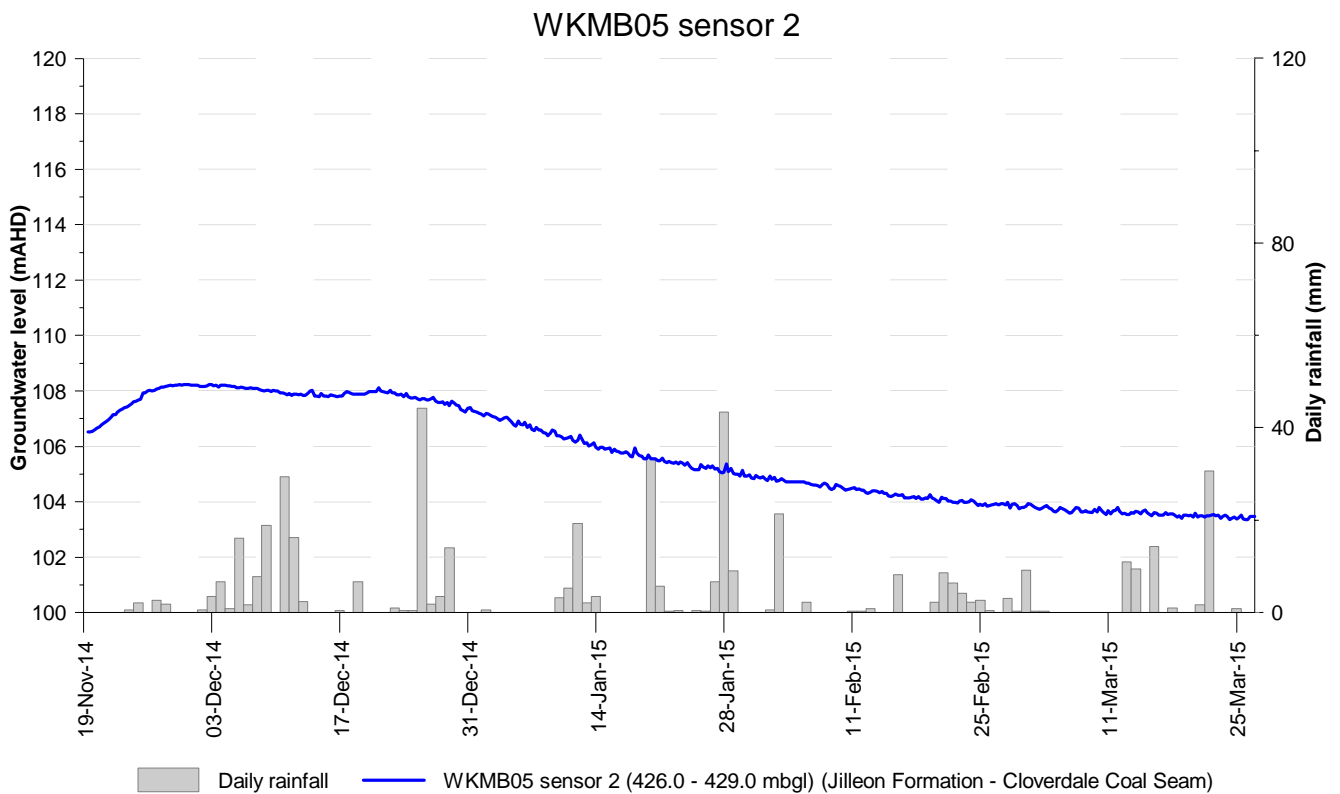
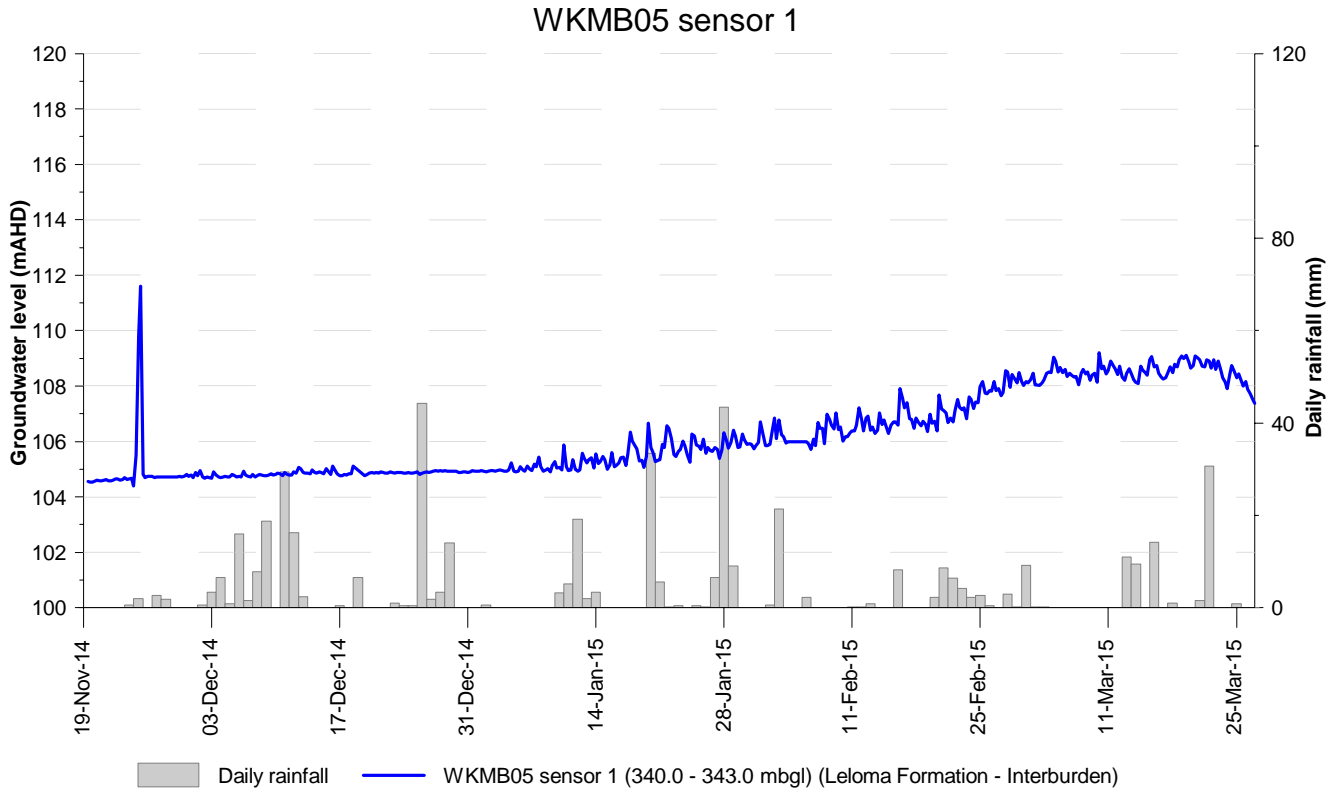
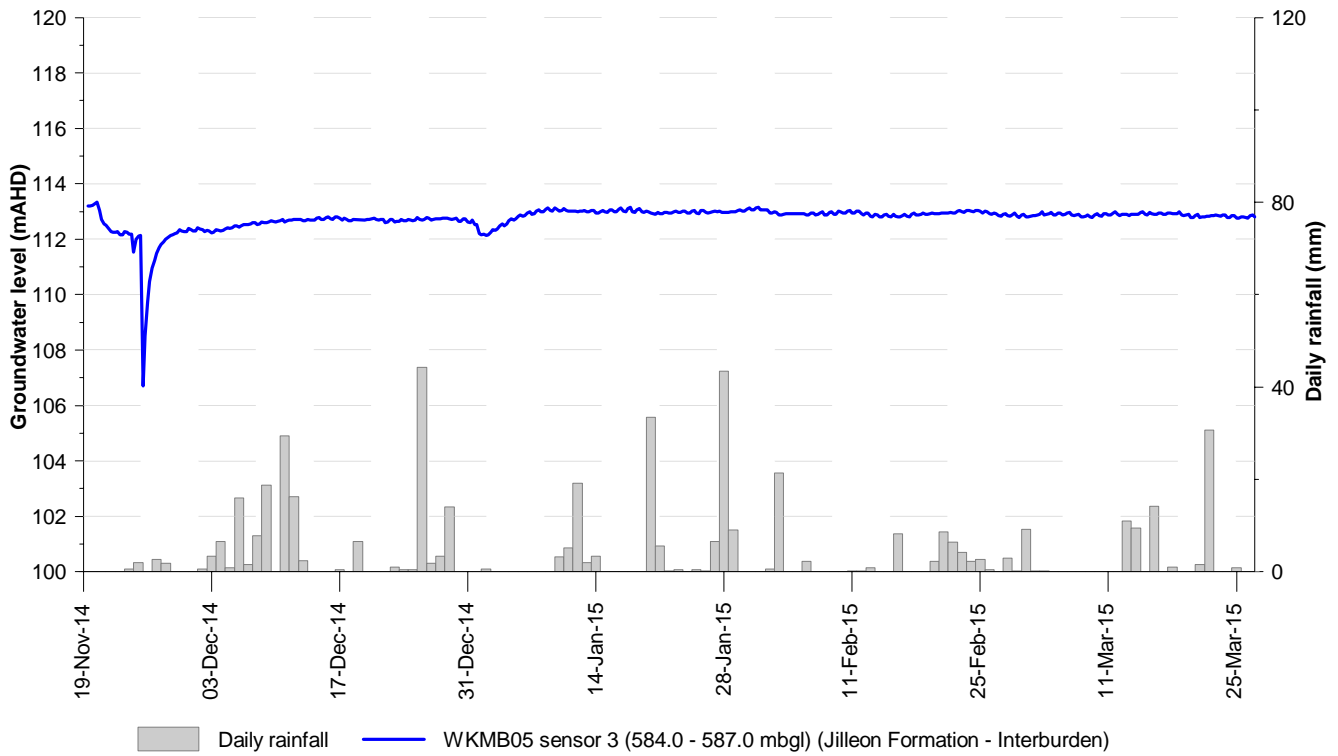


Figure A.32: WKMB05 sensors 1 and 2

WKMB05 sensor 3



WKMB05 sensor 4

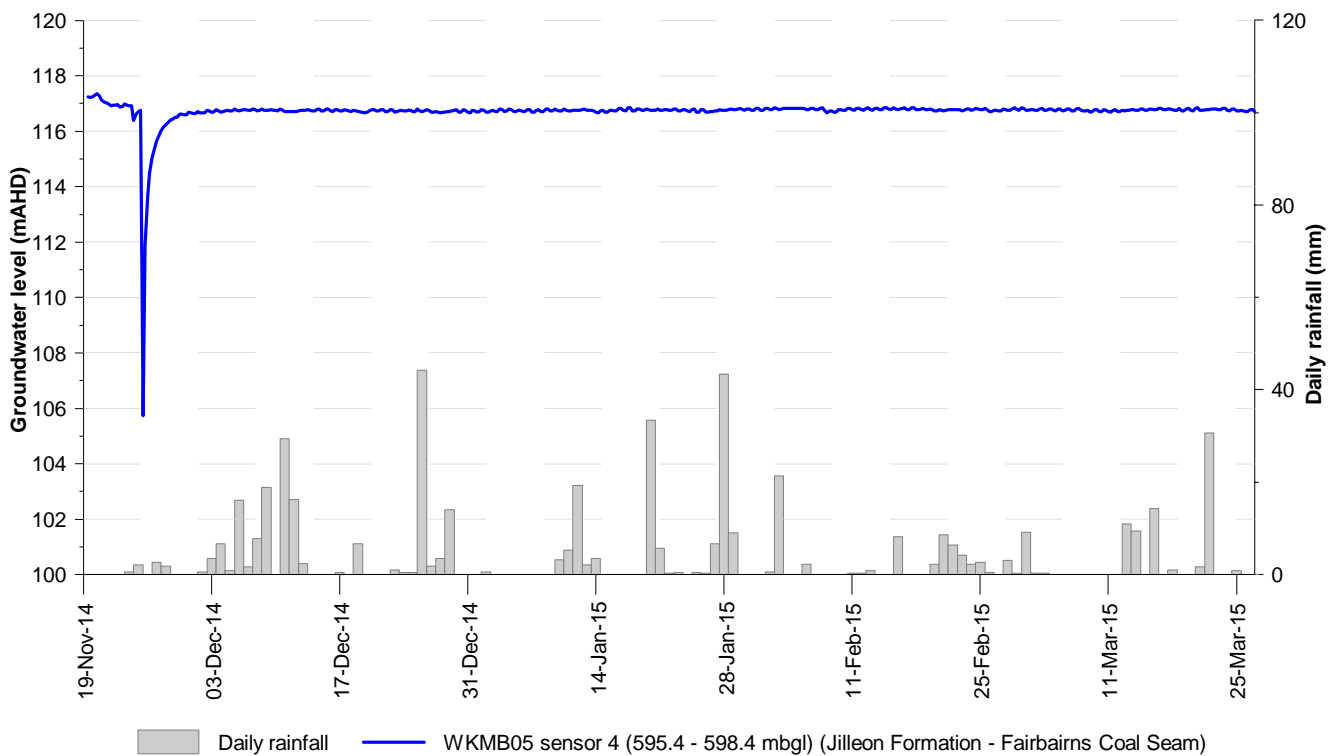
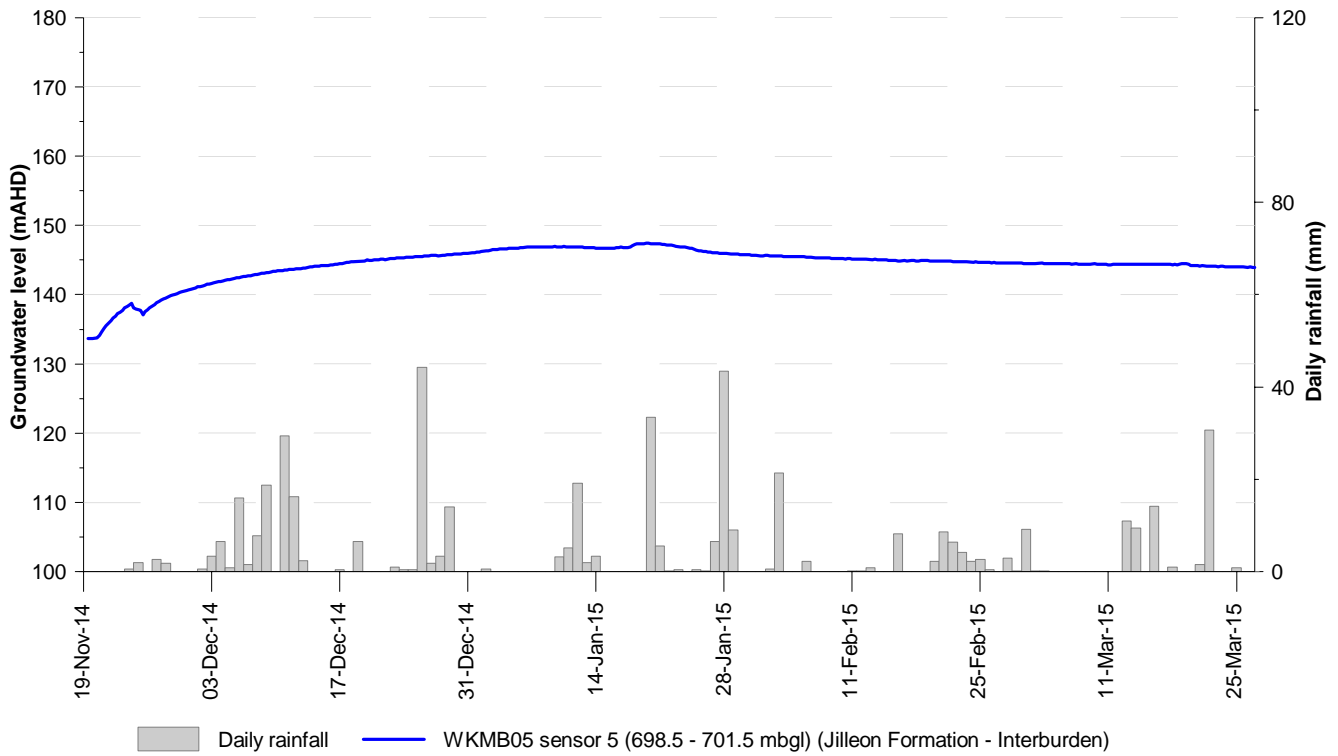


Figure A.33: WKMB05 sensors 3 and 4

WKMB05 sensor 5



WKMB05 sensor 6

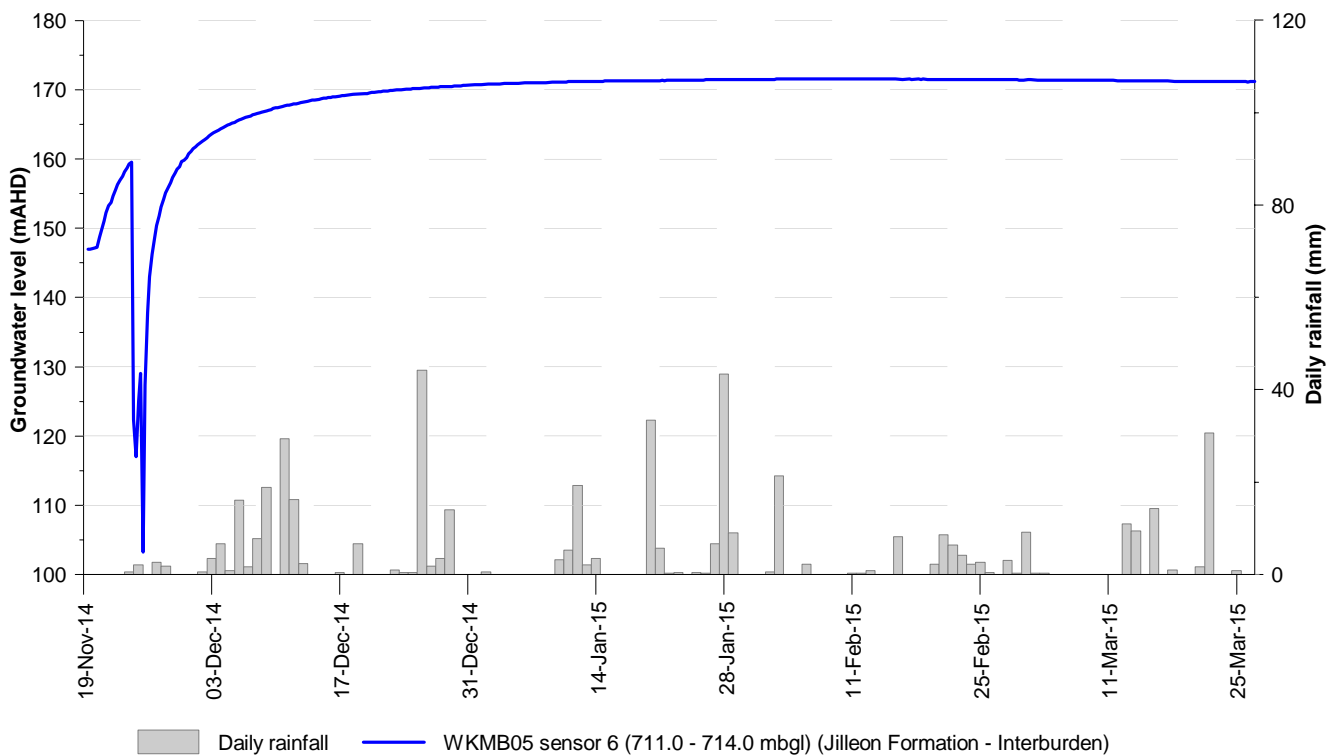


Figure A.34: WKMB05 sensors 5 and 6